AMERICAN GAS ASSOCIATION

Monthly

TEMBER
1957

LOOK WHAT GAS OFFERS YOU TODAY

The cleanest, most modern kitchen money can buy!

Today's Built-in Gas Range Cooks Whole Meals Automatically. It's loaded with wonderful controls — it's automatic all the way! And when you cook with Gas, you have perfect control of cooking temperature on top of the range, in the oven, in the broiler. High heat when you want it hot; low heat when you want it low. No warm-up wait, no hangover heat. It's clean heat, too — the famous blue flame eats up smoke and odor.

Servel Gas Refrigerator Plops Ice Cubes Almost into Your Glass! It's Servel's exclusive ice maker—the handiest invention since the can opener. It makes ice cubes automatically, keeps a serving basket full, ready to use. And Servel has no moving parts in the freezing system to wear out! No wonder it's backed by a 10-year warranty! What's more, it works silently, dependably on economical Gas.

AMERICAN GAS ASSOCIATION

BURNER-WITH-A-BRAIN has a new top burner heat control that "feels" the heat of the pan, then raises or lowers the flame to maintain just the temperature you want. Food can't scorch or burn.

ONE-ICE-CUBE—OR DOZENS! Here's a close-up of Servel's clever ice-maker—the magic invention that makes ice trays obsolete! Plenty of ice for cool summer drinks. Only the Servel Gas refrigerator has it!

Cabinets by Youngstown Kitchens

See the new Dixie built-in Gas range and the new Servel refrigerator in the New Freedom* Gas Kitchen display at your Gas company or Gas appliance dealer's.

*Reg. A.G.A.

ONLY GAS

does so much more...for so much less!

The modern, economical fuel for automatic cooking • refrigeration • water-heating • clothes-drying • house-heating • air-conditioning • incineration.

Watch "Playhouse 90" with Julia Meade on CBS-TV. Sponsored by your Gas company and the Gas industry. See local listings for time and station.

Forward to St. Louis seems to be the theme of our convention cover

THE vital role of human relations in the gas industry will be told by a trio of guest speakers at the A. G. A. convention next month. Mrs. Denny Griswold, editor and publisher of "Public Relations News," will give her views on how to deal with the public; James F. Oates Jr., president and chief executive officer, Equitable Life Assurance Society, will compare the ideals shared by the insurance and gas industries and will point out their duties and obligations to the American public; James F. Healy, a Harvard University associate professor of industrial relations, will cite some of the problems faced by gas industry management. . . . Newest addition to the general sessions program is J. C. Hamilton, president of Arkansas-Louisiana Gas Company. He will speak on the background and purchase by his company of the Servel air conditioning business. Highlight of the convention will be the final "Shoulders to the Wheel" luncheon featuring speakers who represent four segments of the industry—the producers, appliance manufacturers, and transmission and distribution fields. Details of convention plans begin on page 2. . . . Southern California Gas Company has faced an old problem—helping fire department personnel to understand natural gas. This report begins on page 6. . . . A detailed report on the A. G. A. research program begins on page 17. It is authored by T. L. Robey, A. G. A. research director.

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Julius Klein, GAMA president, will address Tuesday session

INGAA President J. J. H... is a major speaker We...

A. G. A. President C. H. Zachry will preside at annual convention

Robert W. Otto is chairman of General Convention Committee

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A.G.A. convention program is ready

More than 4,000 representatives of gas utility, pipeline and manufacturing companies are expected to attend the 39th annual American Gas Association Convention October 7-9 in St. Louis, according to Robert W. Otto, General Convention chairman and chairman of the board, Laclede Gas Company, St. Louis.

With but a few exceptions most speakers had been chosen as this issue of the A. G. A. MONTHLY went to press.

Four outstanding gas industry executives will be presented at the "Shoulders to the Wheel" luncheon by C. H. Zachry, A. G. A. president and president, Southern Union Gas Company, Dallas. The luncheon, highlight of the convention, will stress the importance of continued unity among all segments of the gas industry. C. H. Murphy Jr., president of Murphy Corporation, El Dorado, Arkansas, will discuss industry unity from the standpoint of the producers; Paul Kayser, president, El Paso Natural Gas Company, El Paso, Texas, will speak for the transmission segment of the industry; Marvin Chandler, president, Northern Illinois Gas Company, Aurora, Illinois, will represent the distribution field; and Stanley H. Hobson, president, George D. Roper Corporation, Rockford, Illinois, will present the viewpoint of

Theodore Wolfe discusses your gas air conditioning

James F. Oates Jr. compares gas and insurance industries

Mrs. Denny Griswold will tell of value in public relations

Harvard Professor J. F. Healy is a general session speaker

Paso President Paul Kayser for the transmission field

The distribution topic will be handled by Marvin Chandler

Roper's Stanley H. Hobson is to give appliance viewpoint

How the producers see things is topic of C. H. Murphy Jr.

the appliance manufacturer.

The luncheon will be held Wednesday, October 9, at 12:30 p.m. in the Gold Room of the Sheraton-Jefferson Hotel as the closing event of the convention.

Prominent speakers at the general sessions to be held each day at 10 a.m. in Kiel Auditorium will include James F. Oates Jr., president and chief executive officer, Equitable Life Assurance Society, James F. Healy, associate professor of industrial relations at Harvard University's Graduate School of Business Administration, and Mrs. Denny Griswold, editor and publisher of *Public Relations News*. She will appear before the October 9 general session.

Mr. Oates, who recently resigned as chairman of the board, Peoples Gas Light and Coke Company, Chicago, will address the opening general session October 7. Mr. Healy will speak the following morning.

In his return before gas industry executives, Mr. Oates will tell of the public responsibilities and ideals shared by the gas industry and the insurance industry. He will point out that both industries are regulated, both are apprehensive over possible governmental encroachment, both are highly sensitive to fiscal, monetary and tax policies, and both have vital duties and obligations to vast numbers of the American public.

President Zachry, in addition to presiding at each general session, will deliver the President's Address at the first general session, giving an up-to-the-minute report on the industry's rapid growth and prospects for future progress.

Two other major gas industry associations will be represented at other general sessions. Julius Klein, president of the Gas Appliance Manufacturers Association and president of Caloric Appliance Corporation, Philadelphia, will speak Tuesday morning. Wednesday's general session will present J. J. Hedrick, president of the Independent Natural Gas Association of America and president of The Peoples Gas Light and Coke Company, Chicago.

Mr. Klein will discuss GAMA's program as it is geared to the protection of existing markets and expansion of future markets. He will elaborate on the importance of the new housing market in relation to the gas utility industry and the gas appliance and equipment manufacturers. From the manufacturers' viewpoint, he will talk about the decline in new housing starts and what it has meant in lost sales, what should be done to take up the slack, and what

Accounting

W. D. Sweetman will report on activities of section in 1957

S. Lloyd Nemeyer will address Accounting Section on Tuesday

General Management

Chairman Leslie Brandt will preside at section luncheon

Chicago Professor Ezra Solomon will address section luncheon

Home Service

Miss Marjorie Chandler heads the A. G. A. Home Service Committee

Miss Bonnie Dewes, St. Louis ad woman, is breakfast speaker

the utilities and manufacturers can do about the situation.

Mr. Hedrick will call upon the industry for increasing unity in the years to come, the only solution as he sees the situation, to meet the rigorous competition that lies ahead. He believes that it is regrettable that Congress and the President have not passed a gas bill. His talk will impress upon delegates his belief that Congress now more fully appreciates the magnitude of the problems facing the gas industry and that they cannot avoid being impressed by the fact that there is no solution to the problem in the sole interest of the producer, pipeliner, distributor or consumer, rather that the solution lies in the common interest. For the years ahead there is just plain work, Mr. Hedrick will state.

Other general session highlights will include the introduction of Mrs. America of 1958 (Mrs. Linwood Findley of Arlington, Virginia) and Miss Julia Meade, the gas industry's television hostess on *Playhouse 90,* presentation of the industry's Distinguished Service Award, and election of officers.

Nine achievement awards will be presented by President Zachry at section meetings during the three-day convention. Two of the awards will be made for the first time: the Public Relations Achievement Award to the member company with the outstanding public relations project during the past year, and the Industrial and Commercial Achievement Award for the outstanding individual contribution to the promotion of the industrial and commercial use of gas.

Other awards to be made include the Distinguished Service Award, the Beal Medal for the best technical paper presented at an A. G. A. meeting during the year; the Distribution Achievement Award; the Operating Section Award of Merit; the Order of Accounting Merit; the Safety Achievement Award, and the Home Service Achievement Award.

All five sections of the Association will hold meetings during the first two days. Convening in Kiel Auditorium assembly halls at 2 p.m. will be the Operating, Accounting and Residential Gas Sections.

Austin W. Merchant, Michigan Consolidated Gas Company, Detroit, will preside at the October 7 Accounting Section meeting. Monday speakers will be Claude F. Wahli, Knoxville Utilities Board, Knoxville, Tennessee; Erwin K. Taylor, Personnel Research and Development Corporation, Cleveland, Ohio; J. H. Purdy, Baltimore Gas and Electric Company, Baltimore, Maryland; and Clifford H. Domke, of McKone, Badgley, Domke and Kline, Jackson, Michigan. At Tuesday's Accounting meeting, James F. Daly, coordinator, General Activities Group, Long Island Lighting Company, Mineola, N. Y., will preside. Addresses will be given by Professor Robert T. Livingston, Columbia University, New York City, and S. Lloyd Nemeyer, president of the Milwaukee Gas Light Company. A panel discussion on present day techniques with ever rising charge offs will follow. Section Chairman W. D. Sweetman, The Peoples Gas Light and Coke Company, will deliver the Chairman's Report followed by a report of the Nominating Committee by E. R. Eberle, Public Service Electric and Gas Company, Newark, New Jersey. Election of officers will follow.

Grove Lawrence, Southern California Gas Company and chairman of the Operating Section, will preside at both Monday and Tuesday sessions. Speakers Monday are Mark V. Burlingame, Natural Gas Pipeline Company of America, Chicago; L. E. Heckman, Columbia Gas System Service Corporation, New York; and Major General L. E. Cotulla,

staff director, Petroleum Logistics Division, U. S. Department of Defense. Tuesday Operating Section speakers will be Joseph E. Keller of the law firm Dow, Lohnes and Albertson, Washington, D. C.; Paul W. Kraemer, Minneapolis Gas Company, Minneapolis, Minnesota; and J. H. Collins Sr., New Orleans Public Service Inc., New Orleans, Louisiana. B. H. Whitmann, The Peoples Gas Light and Coke Company, will give the report of the Nominating Committee. Elections of officers will follow.

On Monday, Miss Julia Meade and Mrs. America will be guests of the Residential Gas Section presided over by W. D. Williams, New Jersey Natural Gas Company, Asbury Park, New Jersey. Speakers will include Sol Weill, George D. Roper Corporation, Philadelphia, and John H. Brinker, A. O. Smith Corporation, Kankakee, Illinois.

The Residential Gas Section will combine forces Tuesday with the Industrial and Commercial Gas Section at a luncheon in the Sheraton-Jefferson Hotel to hear J. Theodore Wolfe, president of Baltimore Gas and Electric Company, discuss a subject which is receiving increased attention throughout the gas industry—all-year gas air conditioning. Mr. Wolfe is chairman of the Gas Industry Development Committee. Presiding at the luncheon will be J. Robert Delaney, Cincinnati Gas and Electric Company, and W. D. Williams. They are chairmen of the Industrial and Commercial Gas Section and the Residential Gas Section, respectively.

This luncheon will be followed at 2 p.m. by a session of the Industrial and Commercial Gas Section at which speakers will be Ralph T. McElvenny, American Natural Gas Company, Detroit; John S. McElwain, East Ohio Gas Company, Cleveland, and F. T. Brooks, Philadelphia Electric Company. Lawrence E. Biemiller, Baltimore Gas and Electric Company, will give a report of the Nominating Committee. Election of Section officers will follow.

The Home Service Committee plans a busy schedule for Tuesday, starting with an 8 a.m. breakfast at which President Zachry and A. G. A. Managing Director C. S. Stackpole will speak, along with Miss Bonnie Dewes, D'Arcy Advertising Company, St. Louis; Miss Margaret B. Doughty, Dow Chemical Company, Midland, Michigan; and Miss Mildred Clark, Oklahoma Natural Gas Company, Tulsa. Heading the A. G. A. Home Service Committee is Miss Marjorie T. Chandler, Consumers Gas Company of Toronto, Canada.

The General Management Section will hear an address by Ezra Solomon, professor of finance at the University of Chicago's School of Business. The principal speaker will appear before the Section's annual luncheon meeting to be held October 8 at the Hotel Coronado. Professor Solomon's subject will be the wage-price spiral.

The selection of Mr. Solomon completes the meeting's program which will include the election of Section officers. President Zachry will present the A. G. A. Public Relations Achievement Award and the A. G. A. Safety Achievement Award. Leslie A. Brandt, Section chairman and vice-president of The Peoples Gas Light and Coke Company, will preside.

Throughout the convention a parade of gas kitchens and laundries will be on display in the Convention Hall of Kiel Auditorium. The New Freedom Gas Kitchens and Laundries are designed by such publications as *American Home, McCall's, Family Circle, Ladies' Home Journal, Parents' Magazine, Women's Day, Good Housekeeping* and *New Homes Guide.*

Industrial and Commercial

Presiding at joint luncheon is Chairman J. Robert Delaney

John S. McElwain will address section on Tuesday afternoon

Operating

Grove Lawrence will preside at Monday, Tuesday meetings

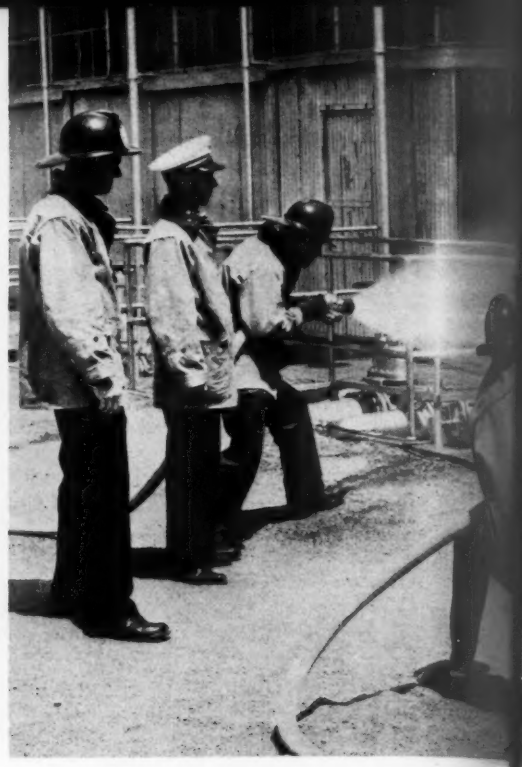
Major Gen. L. E. Cotulla will address the section Tuesday

Residential

Chairman W. D. Williams will preside at the joint luncheon

Sol Weill of Roper will speak at Section Monday afternoon

Joe Byrne, Southern California Gas Company speaker, demonstrates with the props used in company's presentation "Facts About Natural Gas"



Teaching firemen the proper method to combat a [illegible] relations program at Southern California Gas Comp[illegible]

Southern California Gas began plan seven years ago; today it is paying greater dividends than ever before

Firemen learn about gas in dynamic PR program

A public relations program that began some seven years ago is still paying dividends for Southern California Gas Company—and paying them in greater measure than ever before.

The basic reason why the returns have continued to multiply through the years is that the program has been a dynamic one, growing as the opportunities and the needs have grown. Today, in its broadened form, it is being directed to the same publics as it was seven years ago, yet because it has kept pace with changing circumstances, it is more effective than ever. At the same time, it has put out offshoots into other fields, and these offshoots are today just as important in the Southern California Gas Company's public relations plans as was the parent program.

The parent activity was a fire department demonstration program. Today, its offspring number three—a renovated fireman's program, a student's introduction to natural gas, which, with minor revisions, serves as a highly effective and entertaining program for service clubs, and a training film for firemen, entitled *Emergency Control of Natural Gas.*

...e is a part of the public
...arn how in scene above

Here is a scene taken from the training film for firemen entitled "Emergency Control of Natural Gas." The film is part of a program to introduce firemen to natural gas

All three programs are typical of the mature policies which make up the company's public relations viewpoint. Working closely with all its publics has long been a basic part of its operating structure, and one of its most important publics has been municipal agencies.

In the fields of local government, Southern California Gas Company is a believer in the value of positive action and participating leadership.

Because of this belief, company executives began casting about some years ago for an effective means of working more closely with fire departments. The general idea had several facets. Basically, it was a matter of trying to acquaint the firemen with the properties of the fuel so they would be prepared to cope with it in any emergency. But no less important was the aim of developing an understanding on the part of the firemen of the gas company's own problems arising from the same emergency—and the company's method of approaching them.

There are certain methods used by a gas company in combating fire that might not appear logical to the uninitiated. A fireman who could not understand why they were being done would be working at odds with the company's men. The results, if not physically harmful, would at least be damaging to morale and reputation.

Furthermore, in an effort to be cooperative, firemen would frequently give unfounded opinions to newspaper reporters, and these would end up in the news columns as facts regardless of their accuracy—or lack of it.

There was, as gasmen well know, no malice intended. It was mere thoughtlessness—something that could be corrected by a sound program of education. The program that was evolved to overcome these problems was a four-part presentation, to be put on as a package in a single showing before individual fire departments.

Learn gas properties

The first section, conducted by gas company instructors, centered about a demonstration of the properties of natural gas. The second section acquainted the firemen with the characteristics of the distribution system, facilities and repair methods. The third section outlined briefly the company's activities in settling claims. The fourth was a plea by a public relations representative for more care in making statements to reporters.

When serious emergencies occurred, responsible persons from both the company and the fire department would get together and review the incident, looking for ways to improve coordination as well as the flow of information.

Relationships grew closer in other ways, as well. For instance, Southern California Gas Company and Southern Counties Gas Company took display space at the firemen's state convention and participated in the program. A large group of firemen inspected a fire protection system at a new compressor station.

Occasionally, results of the program would be brought home in dramatic fashion. In their files, gas company executives have dozens of newspaper clippings with scare headlines, containing inaccuracies and pure conjecture, pinning the blame for a disaster on gas.

Along with them, they have a growing batch of clippings that show what education of the firemen can accomplish.

One such article appeared some 10 days following a firemen's demonstration meeting in Alhambra. In a lead story bannered, "Alhambra woman burned in home explosion," the subordinate headline read, "Investigators puzzled as to source of gas."

In the body of the story, one could read between the lines to detect the good influence of the firemen's program:

"At first, an accumulation of gas in the bedroom was blamed for the explosion which reports quoted the injured woman as telling the police was touched off when she struck a match to light a cigarette.

"However, Southern California Gas Company inspectors, who checked the home shortly after the blast, said 'there were no gas leaks anywhere in the apartment and the gas petcock in the bedroom was shut off.'

"Damage resulting from the blast . . . was not determined immediately."

This was objective reporting. Nothing was suppressed—not even conjecture—but it was shown up for what it was. No false conclusions were drawn.

Gas company officials might have preferred that nothing at all be said with reference to gas, but all would agree that such a situation would be no more than wishful thinking. Whenever a fire or blast occurs, gas is bound to be suspect. It can't be kept off the front pages.

But it can be treated objectively, as this incident shows.

In the years that followed the inauguration of the program, it continued to win favor and reap benefits. It was seen by nearly every fire fighting unit in the territory, and the gas company found its relations with the firemen being strengthened with every showing.

Eventually, however, a saturation point could be foreseen. Although the departments had some personnel turnover, re-showings in any department would be certain to be repetitious for most of the men in the audience. Interest was certain to flag.

Additionally, the program was difficult to schedule. Firemen could only be gathered together at certain times, and an emergency could upset the best planned schedule. Call-backs were costly and time-consuming, with several men and hundreds of pounds of demonstration equipment being involved. It was clear that a change was in order.

The fire department, as well as the gas company, had some ideas on the subject. Why not a film? The film could be made a part of the Los Angeles Fire Department's own library, which is nationally recognized for its authenticity. The film would have the stamp of authority of one of the outstanding fire departments in the country. Like other films in the library, it would be made by firemen for firemen. At the same time it would show in objective fashion the ideas of the gas company on how gas should be handled in emergencies.

The 30-minute, sound-color film, *Emergency Control of Natural Gas,* was the end result.

The film's title is completely descriptive. No punches are pulled. There's no soft pedaling of the hazards of the fuel. Pictures of a home leveled by a gas explosion are shown. Careless and thoughtless acts on the part of the general public are pointed out as the principal causes of accidents involving gas. Burning gas is evident in several sequences.

It's a film for fire fighters, not for the general public. It merely shows firemen how to prevent and combat gas fires. It shows them what measures to take in reporting fires; what valves may be safely turned, and which should be left untouched until the gas company arrives.

It explains the use of redwood plugs. It tells under what general conditions the premises should be evacuated. It points out the advantages of permitting blowing gas to remain ignited. It shows the importance of having a control plan worked out before any sources of gas are shut down. It explains the value of cooling exposed equipment to prevent failures at critical points. It warns against flooding excavations with water.

It shows what the gas company itself will do to bring the emergency under control.

While detailing the various problems and suggesting their solutions, the movie's commentator is careful to stress that gas is a "good neighbor, makes an important contribution to our modern way of life" and is a good friend if treated with proper respect.

The film sets that stage for the gas company representative who runs the film to make a plea for cooperation in matters involving claims and the press. Says he:

"Until you are sure of the type of fuel involved, we suggest that you make no voluntary statements to the press regarding the cause of the fire or explosion. Detailed investigation of incidents that appear to be caused by natural gas sometimes prove that the broken gas lines are the result of steam explosions or flammable gases other than natural gas. In such cases we would certainly like you to be specific in stating that the fire or explosion was caused by gasoline, butane, or propane; please don't just say that the accident was caused by gas.

"To the public, that means natural gas. While we have no objection to being identified when we are involved, we dislike being associated with incidents caused by other products.

"If a reporter asks you for information about an incident where natural gas is obviously involved, we would appreciate your referring him to our people.

(Continued on page 16)

Michigan Consolidated tries sales canvass

● Strong faith in canvassing as a means of selling appliances prompted Michigan Consolidated Gas Company to try this easy effective sales program: The utility invited all of its manufacturer and distributor salesmen to spend one full day ringing doorbells in Grand Rapids. At the utility's regular morning meeting on July 8, territories were assigned and a skit was given covering the important points of a good canvass call. Following the meeting, seven of the utility's supplier salesmen went out and knocked on 224 doors, picking up 28 prospects and one sale. These comments made by four of the wholesale salesmen are typical of the enthusiasm created by the program.

"That was a wonderful experience for me and brought me face-to-face with the people who buy our products. I think it would be good for all of us to do this more often."

"This experience brought me closer to your salesmen and their problems and as a result I feel that I will be more effective in helping them."

"Canvassing is as effective today as it was 25 years ago."

"I was always an advocate of the use-the-user method of selling. I've changed my mind completely. I'll take canvassing anytime."

(L. to r.): F. F. Leonard, A. E. Eshenfelter and J. E. Malamatinis study a Ruud water heater during the "water workshop"

Water workshop aids sanitary engineers

Questions by a sanitary engineer on the production and use of hot water recently led to answers not only for him but also for 80 fellow engineers in the southwest district office of the Ohio Department of Health—all because of a "water workshop" sponsored by Ohio Fuel Gas Company in Springfield.

T. Z. Dunn, Ohio Fuel's commercial sales manager, said the workshop created a lot of good will between restaurant, institution, health and gas company personnel.

The two-day school, co-sponsored by the Ohio Department of Health, Ruud Manufacturing Company, F. F. Leonard, Inc., and The Hobart Manufacturing Company, proved such a success that three additional schools were scheduled in the gas company's territory.

There were 83 sanitary engineers from 20 counties in attendance. Of these, 30 were connected with the state health department. The others were municipal and county sanitation representatives.

How did it all come about?

Much of the answer is wrapped up in a fellow by the name of A. E. Eshenfelder, commercial representative with Ohio Fuel Gas Company. A friend of Mr. Eshenfelder, R. R. Anderson Jr., sanitary engineer working in the Springfield area, was constantly "hounding" the gas man for information on gas water heaters.

Mr. Eshenfelder realized that if a capable man like Mr. Anderson was sometimes at a loss to explain the workings of a gas water heater then, there had to be others in the same predicament. These men often found themselves in the position of having to suggest that a commercial or institutional place close because of a lack of sufficient hot water for dishwashing or other needs.

A "pilot meeting" was held in April, 1957 by Ohio Fuel for representatives of the Ohio Department of Health. It was then that the go-ahead signal was given. Mr. Dunn, Ohio Fuel sales manager, said one of the state men commented: "This opens up closer cooperation between the state and industry."

Invaluable information

Information obtained by the sanitary engineers is expected to prove invaluable in their work with dairies, swimming pools, restaurants, farms, rest homes, hospitals, schools and meat packing plants as well as other commercial and institutional installations.

Water supplies were discussed by W. E. Spies and A. T. Knauer, Ohio Department of Health, and K. H. McCorkle, Jr., Taft Engineering Center, Cincinnati, after which a film, "Pipeline to the Clouds," was shown. This first-day session was followed by another at which F. F. Leonard of the F. F. Leonard Company, Columbus distributor for Ruud and Val Plouffe, Ruud Manufacturing Company, Kalamazoo, Mich., reviewed the history of water heating systems and the uses of hot water. A motion picture prepared under the supervision of the American Gas Association, "How Clean Is Clean," was shown.

On the second day of the water workshop, Mr. Leonard reviewed various typical water heating problems. R. C. Humpleby and R. W. Clapper, representatives of The Hobart Manufacturing Company, covered pressure testing, filling time and other aspects of dishwashing machine operation. Water heater sizing in the field was reviewed by Messrs. Eshenfelder, Anderson and Dunn. Alex Mezur of the Cincinnati City Health Department discussed public relations.

Each of the sanitary engineers was provided with a brochure covering material covered in the sessions.

Ohio Fuel serves approximately 675,000 customers in nearly all sections of Ohio. The company, according to Mr. Dunn, has always worked closely with equipment dealers and manufacturers. "The important thing about this workshop, in addition to good will created," Mr. Dunn said, "is that now these sanitary engineers are able to talk with better understanding about water heating."

Right: Cleo Maletis and her son Edward find that using an automatic washer and gas dryer takes the work out of getting clothes clean

Above: Crowds like this one were lined up during the entire 15 days the Blue Flame home in Portland was open to the public

Residents turned out en masse to see the dream home of Cleo Maletis featuring the New Freedom Gas Kitchen she won as Mrs. America of 1957

Blue Flame home makes headlines in Portland

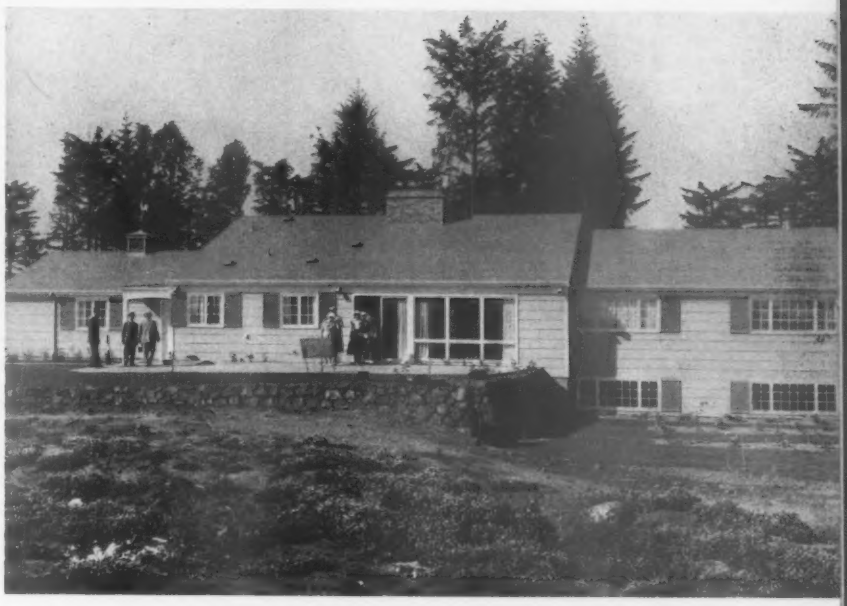
Mrs. America's Blue Flame home is the best known private residence today in Portland, Oregon. This is true because it was the stage for the biggest and most successful promotion of a single dwelling in the city's memory.

Throngs that filed through the spacious all-gas home in Forest Hills, a partially wooded hillside tract in the west-side suburbs, during the 15-day showing in June were estimated as high as 35,000.

And Mrs. America of 1957—Cleo Maletis of Portland—personally showed the new home to her Northwest neighbors in the literal sense, being on hand every day and for most of the hours during which the doors were open. This 32-year-old housewife turned out to be a real trouper, as stage people say.

When Mrs. Maletis and her husband Chris decided they wanted their dream home in which to install the all-gas kitchen she won in the national home-making contest, they agreed to a public showing and whatever promotion was needed to make it a success.

Left: Cleo Maletis is shown in a section of the New Freedom Gas Kitchen she won when she was selected as Mrs. America of 1957



Above: This rear-view photo of the Maletis home shows patio and sliding door from the family room, and bedroom wing at the right

They could hardly have foreseen how much involved they would become, in some ways more so than in just building a house. But they joined wholeheartedly in arrangements with the tract developer, designer, builder, equipment and material suppliers, decorators, newspapers and, not least, Portland Gas & Coke Company, for a promotion that would be Mrs. America's top contribution to modern homemaking in her home town.

One of the realtors working in the subdivision, Wylis Bucher, became coordinator for the entire project. Their earlier ideas had jelled into the decision to go ahead after the Maletises visited Ramona and Carl Deitemeyer at Lincoln, Neb., in December and saw the Blue Flame home erected there by Mrs. America of 1956.

The gas company took a prominent but not the dominant role in the project, leaving the coordinator free to arrange for a broad range of materials and equipment on a promotional basis. Selections were reviewed by a committee to assure against conflicts and for quality throughout.

By last March 1 planning had taken definite shape, and specifications were ready in general. P. G. & C. printed a 12-page prospectus for the coordinator. The company agreed to produce all publicity material on the home and its showing, though it did not handle publicity for firms not directly associated with the gas industry.

The 36 sponsoring concerns were named in a small, eight-page folder prepared by the gas company to provide each adult visitor with the story of the Mrs. America Blue Flame home. This folder, printed in blue and black on white, also listed the six manufacturers of gas-fired equipment installed in the kitchen and basement.

Promotion Manager Edward E. Cahill in P. G. & C.'s sales department provided eight billboard type signs. Largest was erected on the front lawn listing the participating firms, alphabetically and all in the same size lettering. These signs were modernistic, done in three colors and three dimensions.

No other product signs were allowed on the premises, except in the double garage. There space was allotted for a table display and sales personnel of each firm to answer questions of viewers as they were leaving the home.

Portland's two daily newspapers publicized the project, reflecting the enthusiasm of Cleo Maletis herself. The region's largest daily, *The Oregonian*, whetted interest with an intensive promotion. One of its executives described the effort as the largest and most successful for a single home ever staged in the City of Roses.

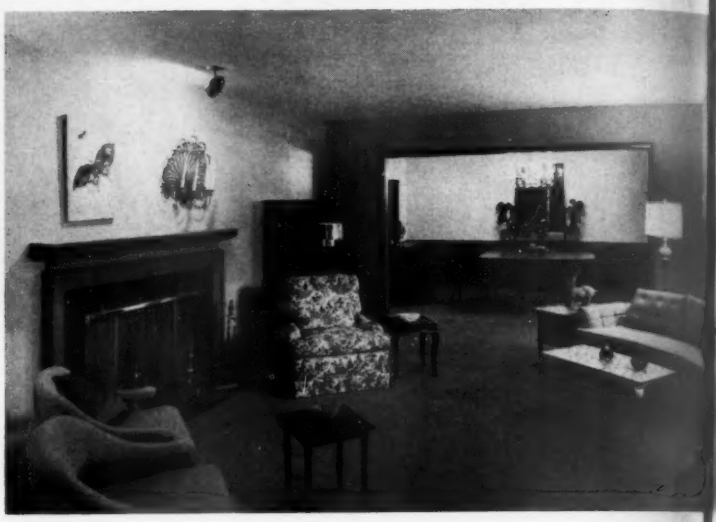
Climaxing *The Oregonian*'s own participation was a separate ten-page, full-size section appearing in all editions of Sunday, June 9. An advance build-up included several scores of spot announcements on affiliated television and radio stations, plus a number of newspaper ads, and illustrated articles in its Home & Garden section on two preceding Sundays, all provided by *The Oregonian*.

As an added lure, the newspaper pro-

This family room—kitchen center, a combination of modern gas appliances, birch cabinets, brick, and linoleum, will probably be the most lived-in room in Maletis home

Mr. and Mrs. Chris Maletis are shown with their three sons (l. to r.): 5-year-old Tom, 8-year-old Chris, 3-year-old Edward

Mrs. Maletis' favorite color, blue, is used lavishly on the carpets and walls of her living room and dining room. It will accent her portrait, to be set over the fireplace



moted an Hawaii vacation for eight days for two persons, including round trip by Pan American World Airways from Portland, as top prize in an essay contest.

Any visitor to the Blue Flame home could enter simply by writing 50 words on "What I Like Best About the Mrs. America Home." As it turned out, the winner was a sprightly little housewife, whose newly married son now lives in Hawaii. The winner now happens to be enjoying an all-gas home of her own.

Mrs. America dominated the promotion throughout. The Oregonian's special section alone pictured Cleo Maletis or her family 32 times in its ten pages. Lead articles were by the home furnishings editor and a feature writer. Half of the 42 items large and small in the section mentioned gas appliances or natural gas, which arrived in the area only last fall.

The *Oregon Journal* also supported the home showing with illustrated features in its "Northwest Living" section two Sundays. On opening day two radio stations broadcast from mobile units at the home.

Several hundred people were waiting (some impatiently) for the gala moment of opening at 12:30 noon June 9. State Treasurer Sig Unander presented a symbolic key to Mrs. America, as a radio microphone picked up their comments. Charles R. Holloway Jr., vice-president of Portland Gas & Coke, extended greetings.

The long line then began to enter the front door. At the same time, an "Outdoor Living Home," another all-gas presentation, was thrown open across the street from the Mrs. America home. Its gas-heated swimming pool had been featured in a two-page article in *The Oregonian,* providing an added point of interest for visitors.

On all three Sundays, long lines awaited entry at the Blue Flame home. Mondays brought out only a few hundred, but interest picked up rapidly as each week progressed. The gas company's view of the results was summed up by Mr. Holloway, who is in charge of marketing:

"We were delighted with the public's reaction. Thousands of people were shown modern uses of natural gas in the home who had never realized how completely automatic gas appliances really are. Our resulting contact with local consumers was far broader than we had expected, both in numbers and in quality. Live sales prospects ran into hundreds."

Rita Calhoun, director of home service, rated the promotion as the biggest on behalf of gas appliances in the 20 years she has been with Portland Gas

(Continued on page 26)

200 utilities participate in promotion

More than 200 gas companies participated in the joint *Parents' Magazine*—American Gas Association New Freedom Gas Kitchen and Laundry promotion during the spring and early summer.

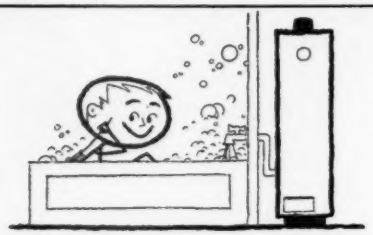
The promotion was launched with an editorial feature in the magazine's April issue entitled *Work and Play Kitchen for Families with Children.*

In addition to the editorial which illustrated a kitchen specially designed by the magazine, the names of the gas companies participating in the tie-in promotion were published with the article, and free merchandising material was provided to effectively promote the gas kitchen and laundry.

Parents' Magazine secured photographs of the individual company displays promoting the kitchen and the editors selected their choice of the top three. The magazine awarded Zodiak wristwatches to sales promotion managers of these winning companies: Portland Gas & Coke Company, Portland, Oregon; Iowa Electric Light & Power Company, Oelwein, Iowa; and the Nashville Gas Company, Nashville, Tennessee.

The Portland Gas and Coke Company of Portland, Oregon, was one of three gas utilities whose displays were selected by Parents' Magazine as best of 200

These displays by Iowa Electric Light and Power Company of Oelwein, Iowa, (above) and Nashville Gas Company of Nashville, Tennessee, also were chosen



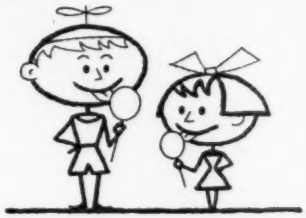
Someone's going to be in PLENTY of hot water when he WINS this

BRYANT Crystalglas 40-gallon

AUTOMATIC GAS WATER HEATER

. . . it could be YOU!

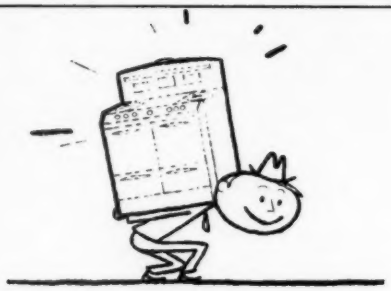
Watch 6th & River, Friday, April 26



FREE treats for the Kids, too!

So . . . bring 'em along!

Watch 6th & River, Friday,

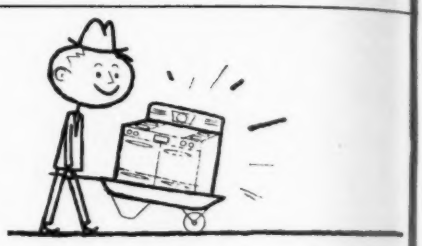


Someone's gonna take home FREE a brand new

1957 UNIVERSAL GAS RANGE!

. . . it could be YOU!

WATCH 6TH AND RIVER, FRIDAY, APRIL 26



Someone's gonna walk away with a brand new

1957 O'KEEFE & MERRITT GAS RANGE

. . . FREE!

. . . it could be YOU!

Watch 6th &
Friday, April

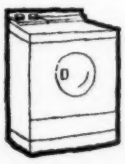
Some Happy housewife

is going to WIN a brand new

1957 Roper Gas Range!

. . . maybe it will be YOU!

Watch 6th & River, Friday, April 26



Some Lucky Gal's hanging out her clothes for the last time today 'cause she's gonna WIN a brand

1957 Philco-Bendix

Automatic Gas Clothes

. . . it could be YOU!

Watch 6th &

You don't have to be a major gas company to promote your position in the community; here's one small utility that enticed half the town's residents to an open house

The ads on the opposite page attracted 2,500 persons to this open house at Greeley Gas Company

Small utility in a big promotion

When the Greeley Gas Company opened its new customer service building in Canon City, Colorado, this year, half the town's 5,000 residents paid the company a social call. And they were there by invitation, too.

It was all part of a well-planned promotion which points up the fact that a small utility can do a highly successful job in this field.

An estimated 2,500 visitors attended the six-hour open house which was heralded by some unusual and effective advertising and publicity.

Personal invitations were mailed to all businessmen in the town and nearby vicinity. Pre-opening publicity and advertising in newspaper and radio were used for one week prior to the opening date. Newspaper advertising consisted of a series of "teaser" ads which built considerable interest in the area—especially among the housewives. (Six typical "teaser" ads are shown on page 14.)

Long preparation of editorial material on the subject of gas in general and the Greeley Gas Company in particular contributed to an eight-page section prepared by the Canon City newspaper on opening-eve.

Everyone registering at the open house had a chance to win one of five major appliances that were given away at a drawing. The prizes were three new 1957 automatic gas ranges, a gas dryer, and a 40-gallon gas water heater.

A free gift was given to all women and children attending.

A feature of the building is the "Blue Flame" room which is available to the public for social and business meetings without charge. Burl Huitt, vice-president of the company and manager at Canon City, said this room has proven to have considerable public relations value.

It will also be used by the company for demonstrations and cooking schools. The room is completely equipped with a modern gas kitchen, laundry and automatic dishwasher.

Greeley Gas Company has operated the gas system in Canon City for two years. During that time it has done much to up-grade service and improve the public relations position of the company in the community.

Cooking with gas—here's how

● In June we published this photograph under the title "Cooking with Gas—But How," and invited our readers to send in the correct solution. Of the many readers who replied, only two "hit the burner on the head"—Floyd A. Rogers of Southeastern Michigan Gas Company and Karl W. Lawson of Public Service Company of Colorado. According to the Milwaukee Gas Light Company, the display can be set up as follows: A hole is drilled up the right-hand post of the plastic cube and a small port is drilled in the post directly opposite the venturi of the burner. The gas pressure is sufficient to pass the gas up the post, and into the venturi. From there it flows to the burner head, at which point it is ignited. The bottoms of the plastic sides should be raised about half an inch above the bottom of the display to allow cooling air to pass into the cube. The burner can be supported by four motorcycle spokes.

Firemen learn

(Continued from page 8)

Our men, who respond to emergencies, have been instructed to give the press complete cooperation. We make this request because in many instances there are technicalities regarding the incident that require explanation.

"It is our desire to furnish newspapers with all of the facts, but if we don't have an opportunity to do this the story often exaggerates the seriousness of the incident or is inaccurate."

The other two programs originated independently of the firemen's programs, but in subject and approach they almost immediately converged.

Company executives had been aware of the need for increasing the public's knowledge of gas, of its cleanliness and its safety.

In October of 1955, a committee composed of customer service, sales, and public relations executives was formed to explore the possible approaches. It was shortly decided that the information contained in the original fire fighters' program would be eminently suitable, if adapted for public consumption.

As evolved, the program utilized deft touches of humor and a maximum number of shiny, eye-catching props to demonstrate the physical properties and combustion characteristics of natural gas, and tell the safety and cleanliness stories.

With only minor variations in the original script as developed in 1950, the show was adapted for both school and service club audiences. Briefly, the content covers odorization, the non-toxicity of natural gas, combustion characteristics, the limits of combustible mixtures, the advisability of venting heating equipment, etc.

The pleasing personalities of the gas company representatives chosen for these shows and the liberal use of the props have made them outstanding successes.

As a side effect, the publicity the shows have received has been impressive. The gas company handles the distribution of press kits in advance of the service club shows to insure a good press.

As added insurance that the impressions made during the demonstrations will have lingering effects, the company distributes two booklets at the end of the show. For children, it's *The Story of Natural Gas*. For adults, it's *How to Get the Most from Your Gas Service*.

Southern California Gas Company has a positive means of gauging the impact of the students' program. A true-and-false test is given the students—once before the program is held and again about a week afterward. Fifteen questions are asked, all having to do with the properties of natural gas.

One, for example, makes the statement:

"When natural gas burns, it makes the dirt that can usually be found on walls or ceilings."

In the first test held among one group of 51 students, 19 answered the question "true." On the second running of the test, only one thought it so. To the statement that "natural gas is poisonous," the original running brought a vote of 35 for "true." Again, in the second test, only one still held to that belief.

Yet the cost has been low. One of the most expensive capital investments was the movie, but it was made at a price of only $3419.18, including out-of-pocket expenditures for film, film processing, and props, as well as expenses charged to the public relations department account for company crews and equipment used in the production of the film.

Operating costs are small. One man can handle each show.

Measuring the costs against the benefits is impossible. The truest measure of the programs' value is the reaction of the audiences, as expressed in the constantly growing files of "fan letters."

Initial A.G.A. research effort in 1925; the program today is one of most versatile of any cooperative, industry trade association

Research in review

By T. L. ROBEY
Director of Research
American Gas Association
New York, N. Y.

The American Gas Association's initial research effort was in 1925 and there has been a continuous research group on natural gas since 1933. The domestic gas research program was initiated in a small way in 1936, and all of these efforts were coordinated and widened in scope as the PAR Program in 1944. Since then some 140 projects have been completed with a better than 90 per cent batting average.

Our research program is perhaps the most versatile of any cooperative, industry-trade association program. This is so because we are a versatile industry. We are primarily a natural resource, transportation and distribution industry and as such do not operate in any single rather specific scientific area as does the paper industry program for example.

We run all the way from highly refined mathematical studies to the newer and as yet unsolved problem of direct conversion of chemical to electrical energy; from a tiny pilot burner on the experimental bench to a pilot plant requiring four men per shift to operate and costing approximately one hundred thousand dollars!

This paper was presented by Mr. Robey at the American Gas Association Production Conference held in Bal Harbour, Florida, May 20-22.

So we do research in many fields including atomic energy—and we get into the darndest things! For example, there is our domestic incinerator project (which, incidentally, has reached a highly successful prototype stage): this work required a good means of evaluation of experimental work and suddenly we realized we did not know what garbage is! Consequently, to provide the proper basis for testing the various incinerator designs, the necessary time was spent in developing, if you please, synthetic garbage!

The new look

Some three years ago Karl Nagler, then chairman of the General Research Planning Committee, called attention to what he called the new look in research —a "swing to the right." He referred, of course, to the increasing emphasis on equipment improvement and developmental work as illustrated by the deep fat fryer, nickel burner, etc., so that there has been and is a definite move to assume leadership in these fields and whose end point is a piece of operating hardware, not just a report indicating potential developmental paths. Our current air conditioning program is a good example. Some six processes will be developed into full or near full scale size for determination and evaluation of operating factors. This is indeed a "swing to the right" and into the area most widely understood as research.

Any research program to be well rounded must, by the very nature of experimental investigation, include so-called basic research. The PAR Program always has included such research and it is in this area that the exotic, the far-forward looking investigation, "the blue sky" work is conducted; about 10 per cent of the program is devoted to such work. It is, of course, the leaven for the bread of tomorrow's developmental research. I refer to the work of combustion fundamentals and the gas fuel cell as example—one is seeking a precise understanding of combustion under normal gas industry ambients—the other is gathering information on a "gas battery"—of potentially high, 50 per cent or better, conversion efficiency.

The year 1956 was an outstanding research year.

In the domestic field a high capacity water heater was developed under the potential threat of the so-called nine kilowatt electric unit and the possibility of higher tank corrosion rate if additional Btu input should raise the heat exchange surfaces appreciably. The obvious, but not heretofore exploited solution, was to heat the tank from the circumference as well as from an internal flue, thus increasing the heat transfer surface and eliminating appreciable temperature increases on the tank wall. The normal 30-gallon heater will produce about 25 gallons of water per hour (100° rise). The newly designed heater will almost exactly double this.

In addition, the experimental model has passed ASA combustion requirements.

In view of today's more expensive building cost per square foot of floor area the potential of double capacity in the same size unit is very advantageous. It is expected that commercial units approaching these performance figures will be available in the next year or two.

Burners redesigned

In the commercial field the Industrial and Commercial Gas Research Committee elected to take already competent cooking equipment and attempt to improve its performance. This was done by redesign of burners for commercial hot tops—open, closed, center heated and griddle. On all except the open model, speeds were doubled with little or no loss in efficiency. These developments were shown to the manufacturers of heavy duty equipment, and the South Bend commercial ranges—Malleable Steel Range Manufacturing Corporation—have incorporated these types of burners in their new line now available. Credit is given to our research in their advertising.

In gas operations research over the past two years a pilot plant scale oil gas production apparatus has been developed at the Institute of Gas Technology. This is a cyclic regenerative type process which further extends the already good characteristics of the Hall type operation to even better efficiency. This was done by more cleanly separating the several concurrent phases of operation—preheating, injection, tar removal. Application of these principles to peak load gas production represents the production of a more compatible gas, with savings in the cost of manufacture.

In pipeline gas research important advances have been made in the proper application of branch connections in transmission pipelines. This project used stress gages on actual branch connection types in full size test specimens and actually measured these stresses as developed in the saddle type and direct welded connections under controlled torsional, vertical and horizontal thrusts. These were plotted, examined and the paths of high and additive stresses determined. From this work has developed some do and do-not-do recommendations for field use to reduce failure caused by stress, in addition to those due to internal gas pressure. This is a very worthwhile report for the transmission line constructor just now available.

The so-called free piston engine compressor unit is the marriage of the power unit to the compressor unit, which has already operated developing cooling with excellent efficiency. It is expected that the final development will be somewhat more compact. This work was undertaken to develop the potential of a low cost drive for a compressor.

Seventeen bulletins have been published this year and two more, secondary stresses and calorimetry, are now available.

This year's program is the result of careful review and selection by the several research committees and their underlying committees. The Research Program in general emphasizes:

1. Appliance improvement; in all utilization fields.
2. Pipeline gas from coal.
3. Transmission activities.
4. Gas fueled air conditioning.

A breakdown of the research program which follows will:

(a) Indicate the versatility of research efforts for a most versatile industry.

(b) Indicate the emphasis on development, while

(c) Not discounting the necessity of long range and fundamental work.

(d) Report some of its 1956 results, and

(e) Quickly indicate the 1957 objectives.

1956 Research program

A number of significant advances have been made:

1. For the first time, the appliance engineer and designer can develop a draft hood on a firm basis, i.e., as compared to cut and try. This information is now available as a draft hood design manual.

2. A high speed 30-gallon water heater, capable of twice the usual hot water delivery, has been designed, built and tested and an appreciably faster table-top heater has also been developed.

3. Carefully supervised field studies of non-aerated pilot development has shown competent service characteristics —in limited sample testing.

4. Commercial range top sections have been doubled in speed through design of special burners. One manufacturer has redesigned his entire line to incorporate this type burner.

5. A demonstration of commercial oven and range top research advances was well received by all commercial gas appliance manufacturers.

6. An improved design of cyclic regenerative oil gas sets was developed. Following the general lines of the Hall set, the performance characteristics of this improved design are outstanding.

7. A low-cost unit for making peak load substitute gases from kerosene was successfully adapted from the East Ohio Continuous Tube Pilot Plant. Investment cost is low, approximately $135.00 per Mcf per day.

8. An instrument—Redox Probe—was developed to enable field determination of reduction-oxidation potentials of soils. This information is vital in estimating degree of soil corrosiveness. The instrument is being evaluated through actual field usage by several cooperating companies.

9. Separate contracts were let to two major research agencies to survey the possible applications of radiation in the field of gas making reactions.

10. An instrument to record changes in the level of particulates in high-pressure natural gas lines has been developed and laboratory-calibrated. Three such units have been built and are now undergoing field evaluation.

11. Definitive study on branch connections in high-pressure transmission lines was completed and a report indicating necessary installation factors has now been published.

12. Cooperative development program has been undertaken with Continental Motors Corporation aimed at increased life and lessened service requirements for natural gas fueled crank shaft engine for domestic air conditioning. Three prototype models have been built.

13. Two studies on the absorption cooling cycle have been completed. These studies were aimed at increased knowledge of the cycle and possible development of experimental research. One has been published, the second will be shortly.

14. The free piston-compressor air conditioning unit is now in the fifth developmental model stage and encouraging results have been obtained.

15. A record number of bulletins were published, seventeen of them!

1956 Reports and bulletins

Domestic gas research and industrial and commercial gas research:

Research Report No. 1243
A Field Survey of Gas Appliance Venting Conditions.

Research Bulletin 70
Research in Automatic Temperature Controls for Commercial Gas Cooking Equipment.

Research Report No. 1253
Field Study of Non-Primary Aerated Automatic Pilots for Commercial Gas Cooking Equipment.

Report On Project I K-7
A Study of the Effect of Heating Rate by Gas on Metal Flow Characteristics or Plasticity and Die Wear.

Research Report No. 1255
Study of Combustion and Heat Transfer Fundamentals in Small Diameter Tubes.

Research Report No. 1257
Heat Application to Commercial Range Heavy-Duty Top Sections—Part II—Uniform Heat Top Ranges.

University of Illinois Engineering Experiment Station Bulletin 435
Distribution of Air Within a Room for Year-Round Air Conditioning—Part I.

Research Bulletin 71
The Application of Heat to Domestic Gas Storage Water Heaters.

U. S. Bureau of Mines Report on Project PDC-3
Fundamental Flashback, Blowoff and Yellow-Tip Limits of Fuel Gas-Air Mixtures.

Research Bulletin 72
A Study of Single Port Gas Burners.

Research Report No. 1263
Heat Application to Commercial Range Heavy-Duty Top Sections—Part III—Center Fired Hot Top Ranges.

Pipeline research:

Institute of Gas Technology Bulletin No. 8
Equilibrium Moisture Content of Natural Gases.

U. S. Bureau of Mines Monograph 9 (NGD-5)
Flow of Natural Gas Through Experimental Pipelines and Transmission Lines.

Gas operations research:

Institute of Gas Technology Research Bulletin No. 24
Interchangeability of High-Btu Oil Gases and Natural Gases.

Gas Operations Research Bulletin No. 7
The Thermofor Pyrolytic Cracking Process for the Production of Oil Gas.

Gas Operations Research Report on Project PM-20
Development of the Redox Probe.

Air conditioning research:

The Johns Hopkins University Final Report, Project ZS-20
A Theoretical Study of the Thermodynamic Relations Underlying the Absorption Refrigeration Cycle.

Since January, 1957, these additional publications are available:

Accuracy of the Cutler-Hammer Recording Gas Calorimeter When Used with Gases of High Heating Value.
Branch Connections.

Research Bulletin 73
Heat Application to Gas-Fired, Portable Deck Bake Ovens.

Report On Project DJ-4-WH
Effect of Certain Variables on Corrosion of Gas-Fired Domestic Water Heaters.

Report No. 1261
Draft Hood Design Manual.

Bulletin 74
Principles of Draft Hood Operation and Design.

Report No. 1264
Performance Characteristics of Gas Ovens.

1957 Domestic gas research

Cooking

DA-2-C

Study of domestic range top section design:

It is felt by some segments of the gas industry that improved appearance and operation of gas range top sections would add much towards improving the competitive position of gas ranges. It is the objective of this project to investigate the design features of gas range top sections and to correlate these features with improved performance, appearance, cleanability, safety and effectiveness. Studies conducted included the development of new burners as well as modifications of the "nickel" burner. In addition, new ignition systems were studied. A full year's work is scheduled on new types of burner design.

DA-3-C

Development of improved domestic gas ranges:

This project aids in reducing the time lag between research program and the incorporation of its results in contemporary

(Continued on page 22)

Someone once said that A. G. A.'s research department is concerned with the pressure in the bottom of a well hole, the draft in a chimney, and just about everything in between. That's a lot of area, but it doesn't faze Lee Robey, director of research, who's spent the past ten years at Headquarters with his fingers in quite a lot of π's.

Mr. Robey's main job is to coordinate the work involved in the many research projects—currently 62—under study by A. G. A. These might range from burner investigations, perhaps a one-man job costing $12,000, to pilot plant synthesis projects, an eight-man job costing about $100,000. This industry research is carried out by groups all over the country, including individual gas utilities and manufacturers, A. G. A. Laboratories, Institute of Gas Technology, Bureau of Mines, and a host of others.

At present, Mr. Robey and his five-man staff are devoting special efforts to projects dealing with gas-fired air conditioning.

After a day of scientific work at the office, Mr. Robey is most likely to enjoy an evening of scientific work at home. "I enjoy anything that has anything to do with science," he says. For Mr. Robey, that might include building an oscilloscope or a high-frequency receiver, reading science fiction, do-it-yourselfing at his Larchmont home, or taking and developing photographs. Under non-scientific interests he includes bridge, "because my brand of bridge just isn't that scientific."

As the father of a teen-age son and daughter, most of his civic interests—including cub scouting—center about children.

His most outstanding characteristic, a fine sense of humor, is neither a hobby nor an occupation—but it does prompt his secretary to say "He's the greatest."

Meet your Association staff

T. L. Robey

Joint efforts of three gas companies have made prospective customers insist that their water heater be "Family-Rated"

New promotion catches on with Pittsburgh residents

Make mine a "Family-Rated" water heater.

That's the request most hot water conscious residents of the greater Pittsburgh area are making these days, and it's all the result of a smartly handled water heater promotion campaign jointly sponsored by Pittsburgh's three gas companies serving the area—Equitable Gas Company, Manufacturers Light and Heat Company, and Peoples Natural Gas Company.

The Family-Rated program has proved to be a very effective method to sell and upgrade water heaters. The campaign is fundamentally the same as those conducted in the past. It has had the usual sales bonuses, the radio, TV and newspaper advertising, and point of purchase material.

The big difference has been with the theme. Family-Rated is a new phrase that has caught on with the homeowner. And although the program originally was aimed at the replacement market, it has been very effective in upgrading the water heaters going into new homes. Builders simply have become sensitive to people asking whether or not the water heater is "Family-Rated."

R. L. Conover, general promotion manager for Equitable, reported that since Equitable merchandises, it knows first-hand just how effective this theme has been. Almost all Equitable water heaters now are Family-Rated, which means a high quality, higher priced, and greater input water heater.

Mr. Conover said the problems faced with regard to water heater sales are these:

1. How to overcome dealer and plumber apathy toward upgrading. They tend to sell price and tank size rather than quality and input.
2. How to sell the idea of continuous hot water service rather than hot water storage.
3. How to lick electric competition and prepare for meeting their high input, fast recovery heaters.

Equitable has been promoting gas water heaters for years and has long attempted to solve these problems. They tried several themes including the "A.U.I." (Automatic, Underfired, Insulated) and "Laundry-Rated." These, Mr. Conover says, did a fair job, but Equitable felt something simple and effective, yet not associated with any manufacturer, was needed. "We wanted a

theme that many manufacturers would be willing to accept in order that the theme could become nationally prominent," he said.

The Family-Rated program works very simply. Advertising is designed to emphasize the greater amount of hot water that is demanded by the average family of today. The great majority of water heaters now in use do not supply enough hot water for the average family. Since the largest single user of hot water is the automatic washing machine, the hot water demand for a family is measured in terms of this appliance (or one the family someday hopes to buy).

The reasoning is this: if the water heater will supply, on a continuous basis, 30, 40, or 50 gallons of hot water per hour required by a given make of automatic washer, then it will surely take care of the other needs of the household. There are, of course, exceptions to the rule, Mr. Conover said, but this rule will apply to 95 per cent of the sales.

The Family-Rated advertising campaign continually impresses upon the customer that he must have a Family-Rated water heater if he is to be assured of an adequate supply of hot water. The actual rating number (such as LR-30, LR-45, etc.) is determined at the point of sale.

The number simply refers to the number of gallons of hot water that the automatic washer requires per hour. The dealer sells a water heater whose recovery rating coincides with the demand of the washer.

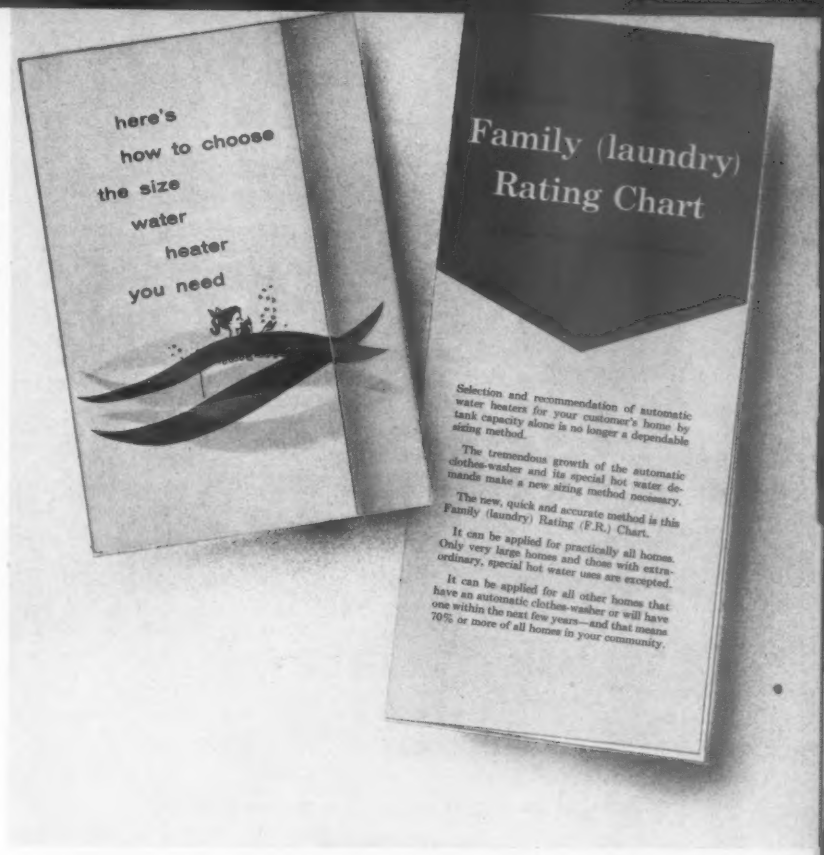
For example, a customer owns or is planning to own a washer requiring 37 gallons of hot water per hour. He then shows the customer a water heater with at least a 37 gallon per hour recovery. It is not difficult to explain to the customer that if he buys anything less than that, he will have inadequate hot water service.

In order to qualify as Family-Rated, a water heater must have the following features:

1. A recovery rating of 30 gallons or more per hour (100 degrees rise).
2. A tank size of 30 gallons or more.
3. It must be automatic, underfired and insulated.

This program, as conducted in the Pittsburgh area, has been an easy solution to the three problems mentioned earlier.

It has helped the dealer upgrade



Ads such as the above resulted in educating the home-owner of his need for a water heater to accommodate his entire family

When the housewife reads this ad, she quite naturally begins to ask herself if she has a water heater of sufficient size

These Equitable Gas Company ads utilized a touch of humor in reminding the reader of his own predicament many times in the past because of hot water problems

quality and input; it sells the idea of hot water service; and it certainly has made it difficult for electric competitors because it eliminates the need for large storage tanks and puts our competitors at a big disadvantage in an input race.

Mr. Conover said that the three Pittsburgh companies are now in the process of registering the slogan and the seal so that its purpose cannot be abused. However, the slogan is available to any gas company caring to use it.

Research in review

(Continued from page 19)

range design. Under this project analyses and evaluation of past and current research data, such as that being made available under other cooking projects, are being employed to develop demonstration units. Additional units will be constructed this year covering further design advances.

DA-4-C

Development of flexible heat resistant gas appliance connectors:

It is proposed, in the conduct of this project, to investigate materials and methods for connecting gas appliances by flexible conduits which will provide satisfactory service under conditions of temperature, flexing, and gas composition. Initial survey and analysis will be completed this year.

DA-5-C

Investigation of gas oven and broiler design:

Competitive pressures indicate the need for new concepts in gas oven and broiler designs. It is the aim of this project to investigate various means for satisfying this goal. This is a continuation of work initiated under Project DGR-11-C.

DA-6-C

An investigation to determine methods of reducing cooking heat release to domestic kitchens:

With the coming increasing importance of home air conditioning, it was felt efforts should be made to determine means for reducing cooking operation heat losses to the surrounding area. The study will start with an engineering evaluation of the problem with experimentation scheduled to follow. Such factors as conventional kitchen ventilation, closed and vented top burners, more efficient burners, etc., would be analyzed.

Water heating

DA-2-WH

The application of heat to domestic gas storage water heaters:

The objective of this project is to extend basic burner design information with regard to the burners' environment in domestic gas water heater combustion chambers. Laboratory models of increased input rate heaters have been constructed and operation-tested. Corrosion testing of this model is being completed. Additional studies of new design principles are also being pursued. Continuation of this project is expected.

DJ-5-WH

Problems related to cathodic protection of gas-fired automatic storage water heaters:

Greatly increased use of the magnesium anode in gas domestic water heaters has raised a number of problems, the answers to which are not available from anode manufacturing sources. We initiated studies in 1956 to obtain these data in order to strengthen the competitive position of the gas heater. A full year's work is contemplated for 1957.

DA-6-WH

Investigation of non-integral storage tanks and water heating devices for utility room design:

This engineering desk study is to develop information on the feasibility and desirability of utilizing a separate heat exchanger and storage means for domestic water heating. Present-day small home design may necessitate removing the water heater from the basement or utility room. This desk study was completed in 1956 and laboratory work is underway.

Heating and air conditioning

DA-5-HA

Investigation of elements of gas appliance vent system design:

Committee discussion indicated a desire to include in a single venting project all of the miscellaneous factors yet to be investigated. This will complete our original six point program for venting research. Major facets being worked on this year include multiple flue connections, flow resistance, etc. The project is scheduled for a full year's work in 1957.

DA-6-HA

Design factors of gas heating appliances for more effective heat exchangers:

This proposal is an investigation recommended in Bulletin 63 for future research. It is aimed at aiding the heating appliance designer produce an improved product, and to help him design unusual heat exchangers which will be called for in combination heating and cooling appliances. The project was initiated in 1956 and is scheduled for a full year's work in 1957.

General utilization

DA-2-GU

Study of more effective use of secondary air to support atmospheric gas burner flames:

Considerable atmospheric gas burner research has been devoted to increasing in proportion, primary air induced through air mixers and a substantial technique for increasing the quantity of primary air has been developed. In this project emphasis is being shifted to more intense use of secondary air, a field that could lead to shorter, harder flames and a reduction in the size of the present conceptions of combustion spaces. Studies have proved the importance of recirculation boundary phenomena and combustion chamber effects on secondary aeration. A full year's work is scheduled to determine the laws which govern these phenomena.

DA-6-GU

Ignition of gases:

This project is aimed at investigating the problem of ignition from both the fundamental as well as applied aspects. Initial studies have been in the form of a literature search and work on low Btu pilot studies as well as studies on other ignition methods. This study will be continued throughout the coming year.

DG-7-GU

Oscillations and pulsations in gas and oil-fired domestic heating equipment:

Appliance designers had reported difficulties in eliminating resonant noises from some of their newly designed equipment. There appeared to be a need for information on practical methods of avoiding these resonant noises. This project was undertaken as a cooperative investigation with the American Society of Heating and Air Conditioning Engineers and the Oil Heat Institute. The work thus far has resolved the reasons why; now the effort will be on how to solve the problem practically. Studies will continue in 1957.

PDC-3-GU (Ext.)

Fundamentals of gas burner performance:

This is an extension of work initiated under Project PDC-3-GU. The study is aimed at supplementing existing fundamental information on combustion characteristics of fuels with fundamental studies of the role of burner and appliance design. The project is involved with work only on points where information is not available. A full year's work is scheduled.

DA-8-GU

Determination of factors causing lint collection on the under side of burner ports:

In various parts of the country reports were received indicating burner malfunction due to lint and dust collection on the under side of burner ports. This project is investigating the factors involved and developing practical methods for reducing this tendency. Laboratory evaluations will continue through 1957.

Incinerator research

DG-3-M

A study of gas-fired incinerator effluents:

It is hoped to gain factual information on the effluents of gas-fired incinerators as a means for comparing operation of the conventional and the new research designs.

1957 Industrial, commercial gas research

I A-5

A study of various methods of heat application to commercial range heavy duty top sections:

This study investigates the possibilities of appreciably increasing the rate of heat release of commercial range top sections either by the use of newly designed atmospheric burners or by the use of power burners. To date we have completed the studies on the open top uniform hot top and center-fired hot top sections and distributed reports. Laboratory work on fry-top ranges is continuing.

I K-7

A study of the effect of heating rate by gas on metal flow characteristics or plasticity and die wear:

It is the purpose of this project to provide data on the effects of fast gas heating rates on hot forming, namely, improved plasticity for a low resistance to deformation and reduction in scale. Because of unforeseen technical evaluation problems, work was brought to a head and a progress report drafted. Additional effort is being expended to solve these problems.

I A-9

Determination and control of proper oven environment for baked foods:

Studies under this recently initiated project are aimed at the determination of the heat and atmospheric conditions best suited for the cooking of various baked foods and of methods of supplying these optimum conditions with gas-fired equipment. This proposed project is considered an extension of Project I A-2. Very appreciably decreased baking times have been obtained and further study is being actively pushed.

I K-10

The influence of wall radiation and the over-all heat transfer problem of high temperature industrial furnaces:

This fundamental study to develop information and data on the factors involved in the transfer of heat in furnaces from gaseous flames, including emissivity and radiation factors was initiated this year.

I K-11

Vacuum heating, treating and melting:

The use of vacuum methods in metallurgical heat applications appears to be growing greatly in significance. It is proposed to conduct an extensive engineering evaluation of how industrial gas fits into this picture.

I -12

Investigation into possibility of increasing speed of gas heating in the manufacture of sand cores for foundry use:

Competitive pressures emphasizing speed indicated the necessity for work in this field. This project is an engineering evaluation of how increased speed may be obtained.

I -13

Commercial kitchen ventilation:

Grease fires and air conditioning loads as well as lack of basic design fundamentals for kitchen ventilation point to the need for an investigation of this problem.

1957 Pipeline research

NC-2

Phase relationships of gas condensate fluids:

The first volume of this two-part monograph will be published this year. The first volume will report results of a series of experimental investigations on the properties of hydrocarbon mixtures pertaining to the recovery of natural gas and condensates of underground reservoirs. It is planned to continue organization and preparation for printing of Part II.

NC-3

Productivity of high-pressure oil and gas wells:

A manuscript entitled, *Study of Productivity of High-Pressure Gas Wells,* has been prepared and is being reviewed. This paper presents calculations of ideal gas flow in a homogeneous reservoir and emphasizes the reasons for deviation of actual field results and those obtained by calculations. Results are presented as stabilized back-pressure curves correlated for the corresponding curves by correlation. For 1957 it is proposed to extend the correlations and field testing in porous media.

NC-8

Study of deliverability of gas from underground gas storage reservoirs:

Back-pressure curves have been prepared from tests made on welds in a storage reservoir and formation permeability and skin effects have been calculated. Additional tests in other areas are contemplated.

The first phase of this project has been completed with the collection of information from many storage fields and discussions of operating problems. Six storage reservoirs have been tested and it is proposed that these same reservoirs be rechecked at pressures differing considerably from those at the time of the first test. Methods for determination of the stabilized back-pressure performance curve will be investigated and consideration will be given to the field application of the unsteady state flow theory as applied to gas storage reservoirs.

NG-22

Secondary stresses:

This project was initiated as a study of the requirements to determine the secondary stresses existing in transmission pipelines and with the aid of a number of cooperating companies such test data will be accumulated over a year's period and then evaluated.

NFX-12

Suspensoids in natural gas:

Three recording high pressure light scattering photometers have been built and sent to cooperating companies for field evaluations toward refining these instruments. The question of sampling has been attacked but further work will be necessary. The selection of a test site to evaluate commercial gas cleaners is being considered and the final objective of the project is improvement in gas cleaners.

NQ-15

Orifice metering of pulsating gas flow:

The first two phases of this project, literature and patent research and mathematical analysis of the problem, have been completed and the test facility has been designed and should be in operation by the end of the year.

The 1957 work employs the test facility to develop an evaluation of the pulsation effect and means to eliminate or correct for it.

NB-16

Methods of measurement of wear in pipeline engines and compressors:

Taking the cue from the railroad industry, a lube oil sampling program was undertaken, the first phase of which was completed in 1956. An extension using a smaller number of compressors for more complete evaluation was carried into 1957. Encouraging results have been developed.

NG-18

Line pipe research:

Following the field test phase which was concerned with the study of four experimental line pipe fractures, it was decided to investigate more fully the initiation of cracks in pipelines.

NY-21

Solar terrestrial research:

This research will be done at the High Altitude Observatory at Harvard University and the University of Colorado and will be co-sponsored by a number of industries. This basic scientific research will contribute toward an understanding of the many subtle influences of sun on earth with particular emphasis on solar variability as a possible cause of changes in weather, aurorae, radio connections, earth magnetism, upper atmosphere physics, cosmic rays and other variable factors in the physical environment of man.

The gas industry is vitally interested in the weather aspects of the project because it is involved in natural gas production, transportation, storage and distribution which are sensitive not only to day-to-day fluctuations in average seasonal temperatures but also year-to-year fluctuations.

NX-19

Extension of supercompressibility tables:

This work is aimed at extending the scope of the basic supercompressibility factor tables in Gas Measurement Committee Report No. 3 with the cooperation of operating companies.

NW-20

Effect of roughness in orifice meter runs:

The effect of roughness in orifice meter runs is being carried out at the U. S. Naval Boiler and Turbine Laboratory in Philadelphia in 2-inch meter tubes.

NB-13

Pipeline efficiency test standards:

The objective of this project is to develop from actual field operation, if possible, a uniform flow formula. This is being done in cooperation with a number of pipeline companies and the Institute of Gas Technology.

NB-14

Interior surface coating of pipe:

Initiated as a survey of the various pipe coatings available, a laboratory program to evaluate these various materials was initiated in 1956 and has continued at a reduced rate in 1957.

Welding

The A. G. A. Pipeline Research Committee agreed to support the research work of the Pressure Vessel Research Committee of the Welding Research Council and the general activities of the Welding Research Council during 1956. Universities participating in the PVRC research program are Yale, Illinois and Pennsylvania State. The first two deal with photoelastic model studies and the latter with the hard model work which will involve 6, 12, and 18-inch openings on a 1-inch thick, 20-inch O.D. header.

Exterior coating

Here it is proposed to study protective coatings and, if possible, to determine a means for evaluating such coatings.

Noise abatement

This proposes the study of the problem of noise that exists in many metering stations, regulator stations, blow-downs and compressor stations. This problem has arisen largely because of developments going up in areas adjacent to such stations long after the station has been built and put in operation. The plan is to look for cause and then to determine best and most economical means of quieting.

1957 Gas operations research

1. *Project PB-18, operation of regenerative pilot plant of improved design for the cyclic hydrogasification of heavy oils:*

The pilot plant is a modified Hall set designed to operate at pressures from atmospheric to 50 psig. with or without hydrogen. As a result of the 1956 program, which indicated the advantages of hydrogasification, it is proposed to study the feasibility of further adapting this improved set design (1) to catalytic production of the required hydrogen integrally in the set, (2) to catalytic cracking of the oil feed to oil gas and, (3) to a combination of (1) and (2).

2. *Project PB-19 and 19A, pipeline gas from coal by the methanation of synthesis gas:*

Now that the chemistry of the Raney-Nickel catalyst system is understood, a number of alternative approaches to the major problem of catalyst regeneration are apparent and will be investigated in 1957. A satisfactory solution will make it possible to conduct at the Institute of Gas Technology an integrated pilot plant operation demonstrating the production of 950 Btu pipeline gas with coal as a starting material. At this point it would be possible to develop investment and operating costs for a commercial pilot plant unit.

(*NOTE:* Project PB-19A consists primarily of the operation of the coal gasification pilot plant to produce the synthesis gas needed for Project PB-19.)

3. *Project PB-23A, pipeline gas from coal hydrogasification:*

This alternate route to pipeline gas from coal hydrogenation is to be explored sufficiently to indicate its potential competitive possibilities. The present approach is to work out the best possible conditions for the more easily gasified coal components, and then gasify the residual char with oxygen in order to make the hydrogen required for the first step. Another phase of the program is to study the effect of various coal pretreatments on the hydrogenation process.

4. *Project PB-23, pipeline gas by hydrogasification of heavy residuum oils:*

As now envisioned, this is a two-stage operation. The first phase, a liquid phase process already coming into use in the petroleum companies, serves to convert the heavy residuum oils into something equivalent to a reduced crude, while the final gas phase step converts the products of the first phase into methane and a small percentage of ethane and higher hydrocarbon. The results with continuous pilot plant equipment for the second stage indicate the technical feasibility of producing methane in this manner. Improved equipment is now available for the first stage. Coupling the two stages together in one continuous operation has the possibility of giving better results than operating the two stages separately as hitherto.

5. *PF-7 and PB-26, odorization projects:*

A. Project PF-7 at Arthur D. Little, Inc. has a continuing program for the testing of new commercial odorants. One new project for 1957 is the modification of the titralog machine for determining total sulfur so that it will distinguish mercaptan type odorants from indigenous sulfur compounds in the gas, including sulfides derived from the oxidation of mercaptans. Another new project is to determine whether the use of much larger amounts, up to 10 pounds/Mcf, of relatively weak odorants will be useful in combating soil absorption and fading.

Also, to be done at I.G.T. is a proposal to fractionate oil gas and oil gas condensates to see whether the odorizing fractions can be concentrated.

B. Project PB-26 is an investigation at I.G.T. of the relative absorption of different types of odorants by different kinds of soil components. The program will prove helpful in the selection of odorants and in satisfying certain public service commissions that every possible effort is being made by the utilities to improve leak detection.

6. *Project PF-15, measuring suspensoids in gas:*

The program for 1957 is concerned largely with further studies of methods of representative sampling in gas distribution systems and the application of the instruments developed at Arthur D. Little for suspensoid measurement. This should give us answers to the previously unanswerable questions on what happens and where when we oil fog and when it is attempted to reduce dust by steam fogging, etc.

7. *Project PDC-3, combustion fundamentals of simple gases:*

The new program is to be directed to a study of the effect of the secondary factors of burner design and environment upon the primary flame characteristics in order to make practical applications of this fundamental information in improved burner designs. This study may lead to the design of burners tolerating wider ranges of substitute gases.

8. *Project PL-16, standard gas for gas calorimetry:*

An effort is now under way to have the Bureau of Standards reconsider its decision to discontinue routine standardization on the ground that the sale of gas on a therm basis puts the matter of standards in the public domain. The appropriation is needed to finance the cost of cylinders for distribution to the industry and will be recovered when these are sold.

9. *Projects PF-27 and PM-28, survey of applicability of radiation to gas making reactions:*

Contracts have been made with both Vitro Corporation of America and Arthur D. Little, Inc. for preliminary surveys to determine whether radiation from atomic reactors or other radiation sources have any economic application in the gas industry. Both organizations were prepared to follow up with specific research proposals, providing the initial survey indicated that the possibilities of such research were within the economic ball park. All agencies and consultants agreed that no crash program was justified by the gas industry at this time, but that an effort was justified to find some constructive research approach.

Battelle Memorial Institute has submitted a specific research proposal for 1957 to study the possibility of regenerating a sulfur poisoned Raney-Nickel catalyst after use as a methanation catalyst in the new fluidized bed process for the production of pipeline gas from coal. There is a possibility that radiation might promote chemical desulfurization in the presence of hydrogen at temperatures low enough to avoid injury to the catalyst.

10. *Gas chromotography:*

This proposal from I.G.T. represents one of the newer analytical media, the applications of which to gas analysis are already being actively considered by ASTM and some gas utilities such as Consolidated Edison Company of New York, Inc. It is believed to offer major advantages in rapidity and economy, compared to the mass spectrometer, which warrant investigation.

11. *Leak prevention:*

Members of the Operating Section as well as members of the Gas Operations Research Committee have sent in numerous suggestions regarding more research on distribution problems. Several of these related to leak prevention by various treatments of gas mains and joints. It is proposed to set up a Formulating Committee with representatives of the Operating Section to examine the various possibilities and determine what sort of a program would be practicable.

1957 Air conditioning program

1. *Free piston:*

In cooperation with a manufacturer outside the gas industry, this project is aimed at developing a hermetically sealed free piston internal combustion engine compressor. So far four engines have been designed, built and run. 1957 contemplates the production of a final engine and compressor.

2. *Crank shaft engine study:*

Completed last year, this consists of a paper study developing specifications for an engine suitable for natural gas-fueled drive of a compressor. The work was published and made available to engine manufacturers for their information and aid in producing a natural gas-fueled internal combustion crank shaft engine. This resulted in a cooperative agreement with Continental Motors Corporation to develop an engine especially for compressor drive.

3. *Absorption cycle:*

The impact of a pump and a high efficiency heat exchanger (plus other fringe improvements) on performance and first cost will be studied. It is likely that hardwear research in depth should be continued in 1957.

4. *Swiss development:*

Combined foreign and American developments have indicated that the application of well-known cooling principles in a unique manner can potentially result in a low first cost, adequately performing, gas-fired cooling unit. Initially planned for completion in 1956, mechanical difficulties developed which indicate prototype unit will be delayed until the Spring of 1957.

5. *Noise elimination:*

In a lithium bromide water system heated directly at high heat input there is the probability that superheating will occur and noise caused by the collapse of superheated steam bubbles is objectionable. Developments in this project already have been of aid to one manufacturer and it is planned to continue the project in the coming year.

6. *Philips engine:*

The Philips engine is an externally fired crank shaft engine having definite possibilities as a gas-fueled drive for compressors. Initially disappointing, direct contact with the Philips Company has indicated successful operation of 30-horsepower units at an efficiency in excess of 30 per cent. This work contemplates the development of a smaller sized unit for use in the United

States. A proposal has been made by Philips and negotiations are underway.

7. *Open cycle absorption:*

The suitability of a liquid dehydrating agent system will be evaluated.

8. *Jet system:*

Five units are to be thoroughly tested in several locations to cooperatively develop additional design and operating factor information.

9. *Engine compressor:*

To cooperatively develop an improved coordinated initial engine-compressor unit as the basic unit in domestic sized Freon systems.

1957 Special Projects

1. *Fundamentals of combustion:*

The objective of this work is to determine temperature gradients and hydrocarbon flames at various constant adiabatic reaction temperatures and to correlate the isothermal burning velocities with the transport properties of the system. This work was undertaken to fill in areas of little or no information in the atmospheric combustion of gaseous fuels. (Part of program developed by Special Study Committee.)

2. *Chemistry of very rich fuel-air flames:*

The objectives are two: (1) to obtain and evaluate chemical information on the formation of yellow "emitters" etc., and (2) to identify smoke limits of gaseous fuels to determine the circumstances for carbon deposition. (Part of program developed by Special Study Committee.)

3. *Application of the fuel cell:*

The production of electricity directly from the combustion process is not new. Some 25 to 50 patents exist in this field, largely in connection with the coaking of coal. This work is a critical literature review of the gaseous fuel cell with particular emphasis on application of natural gas. Experiments in England using hydrogen and oxygen have produced electricity at 65 per cent efficiency at 8/10ths volt and .4 amperes per square centimeter. A moderate scale experimental approach is planned.

Mrs. America

(Continued from page 12)

& Coke. She was on hand during most of the open hours, baking and serving cookies and answering questions about the kitchen's gas appliances.

"The Blue Flame home attracted large numbers of substantial family groups, many young matrons with their children," Mrs. Calhoun noted. "They were interested most of all in the kitchen and family room, and how these rooms were arranged for care of small children and ease of maintenance.

"The beauty and modernity of gas equipment seemed to amaze many of the visitors, who perhaps were thinking of the range in Grandmother's house." Portland's current resurgence of interest in gas equipment for the home only dates back to 1956, when arrival of natural gas brought reduced rates and an abundance of this type of fuel.

This Blue Flame home glows with the personality and preferences of Cleo Maletis herself. With Donovan Byers of Universal Plan Service, Portland, she worked out plans for a spacious home with single story and full basement, ample for a growing family which currently boasts three small sons. The home has 2,567 square feet on the main floor.

In styling, the family chose Early American, and the outstanding exterior feature is a front porch along the center portion with six square white pillars. Family room and kitchen look out through floor-to-ceiling windows and sliding glass door to the back patio.

In the New Freedom gas kitchen she won as Mrs. America, the eye feasts on a cooking ensemble in rich coppertone, accenting birchwood cabinet doors and wood-grained blue counter tops. The four-burner cooking top is seated on a cabinetted island beneath a decorative copper hood. Automatic gas oven and broiler are a built-in unit.

An Ice Maker refrigerator, white with coppertone highlights, blends with the color scheme. In the first floor laundry room are pink-hued matched washer and gas dryer.

In the spacious living room, colors are keyed to the portrait of Mrs. Maletis painted by Paul Ortlip, New York, as another prize in the national homemaker contest. She posed in the light blue gown she wore in Portland's Rose Festival parade last year, and the room's carpeting is a harmonious blue.

Natural gas does the work in the Maletis basement. A single forced air heating plant with high velocity fan and input of 150,000 Btu an hour will keep the home warm.

Two automatic gas water heaters, fully 45 feet apart to save on heat and waiting time by eliminating one long pipe run, supply the family with ample hot water. A 40-gallon model supplies the kitchen and utility room, while a 20-gallon heater takes care of the two full bathrooms.

All in all, the new Blue Flame home has been quite a success, both for better living for Cleo Maletis and her family and for the promotion of natural gas for home use. The prevailing opinion in Portland is that the two Mrs. America homes in Nebraska and Oregon establish a worthy precedent for future Mrs. Americas.

Peoples Gas promotes six executives

FRANK L. GRIFFITH and Karl B. Nagler have been elected to the newly-created office of senior vice-president of The Peoples Gas Light and Coke Company of Chicago.

Mr. Griffith and Mr. Nagler, who for many years have been vice-presidents in charge of accounts and operation, respectively, have been relieved of certain administrative responsibilities in order that they may devote their entire time to planning, research, rate and regulatory matters and other special assignments. Both men are also directors of Chicago District Pipeline Company, Natural Gas Pipeline Company of America, and Peoples Production Company, subsidiaries of Peoples Gas.

Other executive changes are as follows:

Leslie A. Brandt, a vice-president of the company, was elected to the additional office of comptroller and will be in charge of all accounting and related functions.

Stuart J. Barrett, formerly assistant vice-president and assistant comptroller, was elected a vice-president and will be responsible for industrial relations.

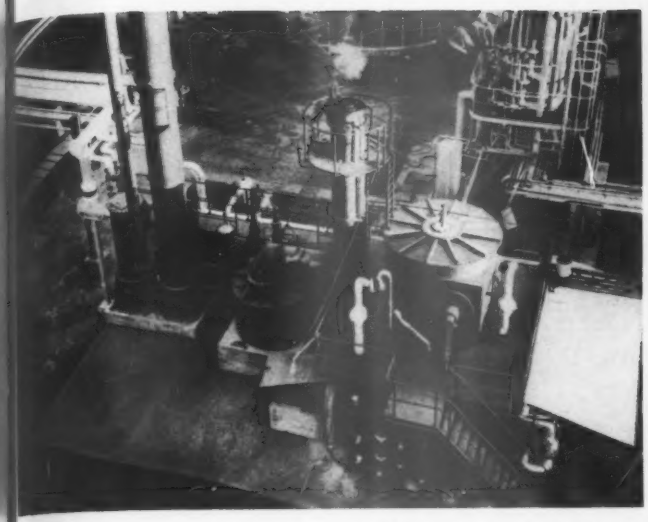
Emory A. Manlove, formerly assistant vice-president, was elected vice-president and will be in charge of operation.

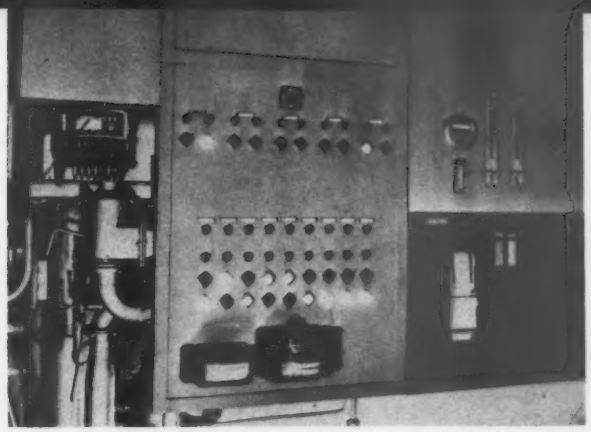
Ralph L. Braucher, assistant vice-president, was elected to the additional position of assistant comptroller.

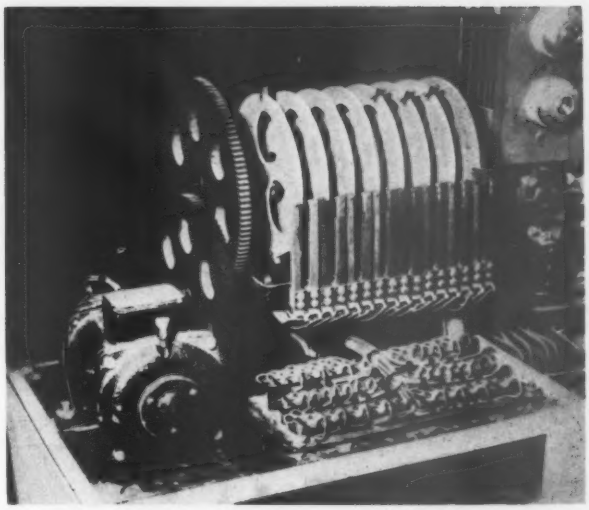
Robert M. Drevs, secretary of the company, was elected to the additional position of assistant vice-president.

Short courses planned

A SCHEDULE of short courses and conferences on problems relating to the petroleum and chemical industries will be held at the University of Oklahoma in Norman during the year 1957-58. Courses scheduled through the year include: Motor Vehicle Maintenance, Theory of Fluid Flow in Porous Media, Credit Management for the Petroleum Equipment Service Industry, Oklahoma Office Management Institute, Water Control for Subsurface Injection, Gas Conditioning, Advanced Fleet Supervisors, Corrosion Control, Gas Measurement, Automatic Control in the Petroleum and Chemical Industries, Stationary Industrial Engines, Executive Development program, Industrial Statistics for the Process Industries.







Above is an aerial view of Micro-Simplex installation showing triple feed at top of generator at right with waste heat boiler and scrubber at left

The panel board of another Micro-Simplex installation by the French utility, Gaz de France, is at left above; below is close-up of timing cans

New process for reforming LP-Gas

A new process for reforming LP-Gas, refinery gases and other hydrocarbon feedstocks into fuels of manufactured-gas characteristics is being introduced by The Gas Machinery Company, Cleveland, Ohio, in cooperation with Stein & Roubaix of Paris, France, whose Pierre Gross is the inventor. The process is entirely automatic although inherently cyclic. Since both the generating and regenerating periods are measured in minutes, simple gas storage systems (or parallel arrangements of two or more reformers) give complete continuity of flow.

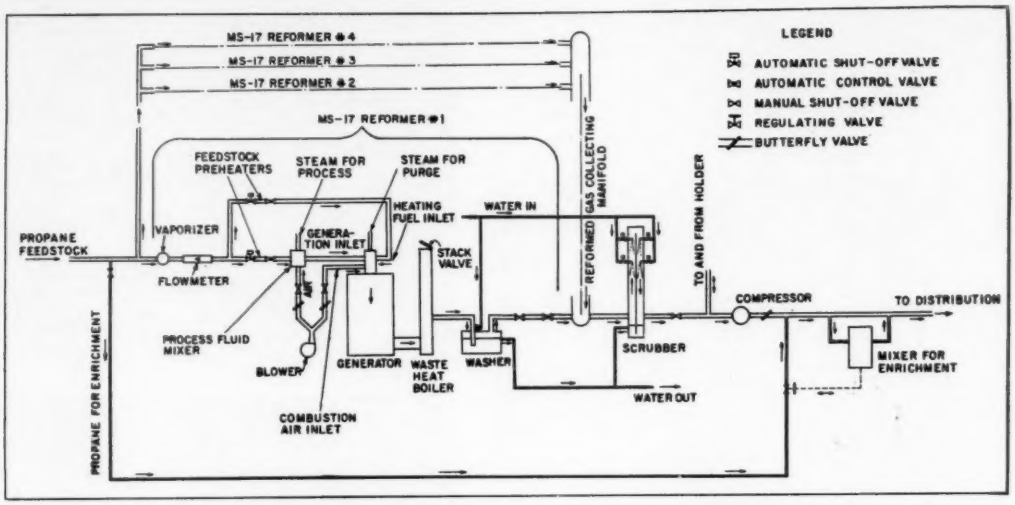
Known as the MS 17 Micro-Simplex process, and already tested and installed by Jean Reboul of Gaz de France in two other sizes and variations, the apparatus fills out the Gas Machinery line of reforming processes and supplements that company's GASMACO single-shell oil gas generators, CAR gas catalytic autothermic reforming units, and fully regenerative Hall-process systems. The Micro-Simplex is intended to appeal to utilities for standby, makeup and special system usage, and to production industries who want their own high-flame-velocity gas generators to reform available LP-Gas and refinery tails.

Capacity appears to be limited to about two million cf per day.

Using a nickel-bearing catalytic bed heated to proper generating temperatures, feedstock, air and steam, all three are injected tangentially through a mixer at the top of the generator. These flow down through the generator to produce the resultant gas—later scrubbed and, if necessary, blended to specification.

The generating cycle is followed by a brief period of steam purging after which air and feedstock are supplied for a heating cycle to bring the catalytic bed temperature back to the proper control limit. Steam purge again ensues before another generating cycle begins.

The steam purge at the end of the generating cycle also transforms any free carbon formed during the combustion cycle into desirable gas constituents (by the water gas reaction). If sulphur, either inorganic or organic, is left in the



Layout of 4-unit system for propane feedstock and propane enrichment before distribution

bed during the generating cycle it is oxidized and purged during the heating cycle by simply injecting a slight excess of combustion air. The process is, thus, additionally distinguished by being suitable for use with sour gases—a problem with other types of reforming plants.

The Micro-Simplex process is flexible because four different parameters are independently adjustable: (1) the cracking temperature during reformation, (2) the duration of contact of reacting gases in the catalytic bed, (3) the air-to-feedstock ratio, and (4) the steam-to-feedstock ratio. Variation of any one influences the characteristics of finished gas. For example: air-gas-ratio can be used to adjust specific gravity; adjustment of reforming temperature will influence calorific value; and the two parameters may be manipulated to hold one characteristic at a desired level while the other is varied. Therefore, the MS system is useful when variations in the characteristics of the feedstock are encountered.

Gases of heating value in the neighborhood of 472 Btu per cf (and down to half that value or below) and specific gravities as low as 0.5 and as high as 0.63, are feasible. Higher heating values are possible through enrichment (as shown in the diagram). High hydrogen content and low nitrogen dilution yield excellent gas characteristics for hot-flame and heat-treating applications—and sure burner operation in any industrial, commercial or domestic appliance.

Control is both by time cycle and pyrometry. In the original paper on the process (presented by Reboul and Gross at the 1956 meeting of Association Technique de L'Industrie du Gaz in France) the control system is described as "pyrochronometric."

A series of eight commutator-type timing discs actuate contactors arranged in a double-delta or bridge-type circuit, to open and close pilot valves for the four-step cycle. The timing at each of the eight discs is set by the process engineer, but the permissibility of actions caused by this "keyboard" type of control is regulated by thermocouples at selected control points within the catalytic bed. Thus the reformer-bed temperatures suitable for (1) generation and (2) reheating are controlled within narrow limits.

In modern instrument terminology the system could be referred to as a "modified-time-cycle and anticipating system regulated by process temperature."

Fast response and compactness of the control system are assured by using electric pilot valves actuating powerful pneumatic operators for the stream valves.

The process is particularly suitable for waste heat boiler applications. Thermal efficiency is upward of 78 per cent even without enrichment (and 85-88 per cent with it) despite the cyclical character of the process and the steam purges.

The simplicity of the system is such that a minimum of supervision is required. This is most important in remote utility locations and in industrial application.

The Gas Machinery Company possesses sales rights for the United States, Canada, Latin America, Britain and certain other countries.

McGuckin appointed

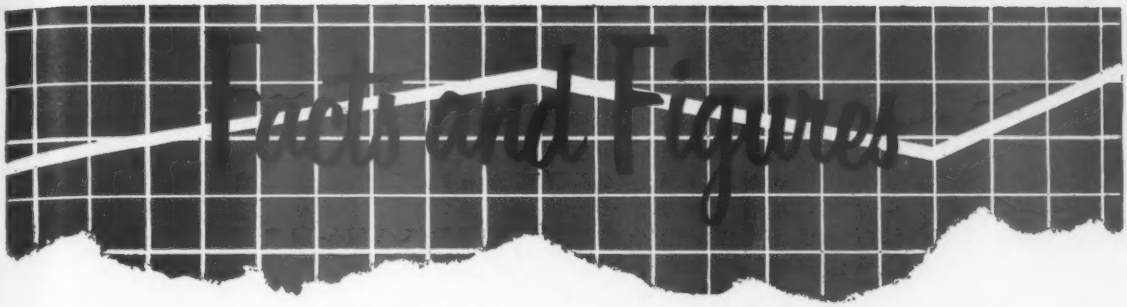
JOHN F. McGUCKIN was appointed gas sales manager of the Philadelphia Gas Works, division of The United Gas Improvement Company. Effective June 1, Mr. McGuckin assumed his new position as administrator of operations of the following PGW sales divisions: builders, house heating, hotel and restaurant, and industrial and technical. Mr. McGuckin has been with the Philadelphia Gas Works for eight years.

Ford heads department

THE Connecticut Light and Power Company has announced the formation of a data processing department at its general headquarters with George A. Ford, former supervisor of the company's machine accounting department, as its director. The new department will study the application of an electric computer to the records and record-keeping of all departments of the company. Mr. Ford's successor is Cornelius J. Scollan.

Name Dickinson, Barrett

THE American Gas Association has appointed two gas industry men to represent A. G. A. on the advisory committee of the Interstate Oil Compact Commission. The men are J. G. Dickinson of Natural Gas Pipeline Company of America, and S. Cassell Barrett of Colorado Interstate Gas Company. The commission is composed of state regulatory authorities concerned with the conservation of oil and gas.



Prepared by A. G. A. Bureau of Statistics

Total operating revenues of the gas utility and pipeline industry (including both pipeline sales for resale and distribution company sales to ultimate consumers) reached a peak of $5,957 million in the 12 months ended March 31, 1957, an increase of 8.5 per cent over the comparable period in 1956.

Net income, $605 million, rose only 3.4 per cent during this same period as a result of increased operating costs. Operating expenses increased by $386 million, up 10.6 per cent for the latest period to a total of $4,013 million. Accounting for the increase in operating expenses were the increased cost of purchased gas, higher labor costs, and higher prices paid for supplies and materials which the industry requires.

Tax accruals of $760 million registered an increase of 4.1 per cent on the year. Federal income taxes, accounting for 58.3 per cent of the tax dollar, declined 6.1 per cent during the latest period, while other taxes increased 22.9 per cent. Of the revenue dollar, the industry is currently carrying down 10.2 per cent to net income while tax authorities claim 12.8 per cent.

Total sales of the gas utility and pipeline industry to ultimate consumers during May 1957 amounted to 5,754 million therms, an increase of 1.6 per cent over the 5,664 million therms sold in May of last year.

Although customers increased by nearly 900,000 since last year, gains in sales to these customers were more than offset by a decline of 2.4 per cent in the sales of gas to industrial users. Industrial production, as measured by the Federal Reserve Board index was 143 (1947-1949 = 100), up 1.4 per cent over May 1956. The Association's May index of gas utility and pipeline sales is 223.7 (1947-1949 = 100).

During the 12 months ending May 31, 1957, total utility and pipeline sales of gas aggregated 73.3 billion therms, up 4.4 per cent over the 70.2 billion therms consumed in the comparable cumulative period a year ago.

The gas appliance picture still reflects the effect of the slump in new home construction. Housing starts during June totaled 97,000 units, down 9.7 per cent from a year ago, and down 4.9 per cent from May. During the first half of this year 506,800 units were placed under construction. This was 13.0 per cent below the same period of last year, and the lowest first half total since 1949.

Shipments of 215,000 automatic gas water heaters during June were off 14.5 per cent from a year ago. During the first five months of this year, 1,121,500 units were shipped. This is 10.4 per cent below the comparable cumulative period of a year ago. During this same period shipments of automatic electric water heaters totaled 322,200 units, down 17.7 per cent.

Gas range shipments of 157,000 units in June were down 15.2 per cent from a year ago. For the five month period ending May 31, 1957, gas range shipments were off 10.0 per cent. Electric range shipments were off 18.8 per cent.

There was a total of 73,700 gas-fired central heating units shipped during June, down 20.9 per cent, while oil-fired burner installations in this same month totaled 36,779, down 10.4 per cent. During the first five months of this year gas-fired central heating units shipped totaled 316,900 units, a decline of 12.1 per cent from last year. During this same period oil-fired burner installations aggregated 193,496 units, down 13.5 per cent.

Shipments of automatic gas dryers totaled 10,900 units in May, off 27.7 per cent, while electric dryer shipments of 20,700 units were down 48.6 per cent.

Gas appliance data relate to manufacturers' shipments by the entire industry compiled by the Gas Appliance Manu-

GAS INDUSTRY INCOME STATEMENT

(MILLIONS OF DOLLARS)

(REFERS TO ALL DISTRIBUTING UTILITIES AND PIPELINE COMPANIES)
TOTAL INDUSTRY

	Twelve Months Ending March 31		
	1957	1956	Per Cent Change
Total operating revenues	$5,957	$5,489	+ 8.5
Operating expenses—operations	3,803	3,437	+10.6
Operating expenses—maintenance	210	190	+10.5
Operating expenses—total	4,013	3,627	+10.6
Depreciation, retirements, depletion, amortization, etc.	401	375	+ 6.9
Federal income taxes	443	472	— 6.1
All other taxes	317	258	+22.9
Total taxes	760	730	+ 4.1
Total operating revenue deductions	5,174	4,732	+ 9.3
Net operating revenues	783	757	+ 3.4
Other income	60	45	+33.3
Gross income	843	802	+ 5.1
Interest on long-term debt	229	210	+ 9.0
Other income deductions	9	7	+28.6
Total income deductions	238	217	+ 9.7
Net income	605	585	+ 3.4

facturers Association. Industry-wide electric appliance statistics are based on data compiled by the National Electrical Manufacturers Association and are reprinted by GAMA in its releases. Data relating to oil-fired burner installations are compiled by *Fuel Oil and Oil Heat*. Data on both gas and electric dryer shipments are released regularly by the American Home Laundry Manufacturers Association.

1957 edition of 'Gas Facts' is published

THE 1957 EDITION of *Gas Facts*, the American Gas Association's annual statistical yearbook, is now available from the Bureau of Statistics at $2.50 per copy for the first five copies, and $1.50 per copy for all additional copies.

The 264-page volume opens with a look-back into the year 1956.

Gas Facts points out that:

Average customers served reached a new peak of 29.5 million, while customers at the end of the year reached the unprecedented level of 30.1 million. Sales of 72.9 billion therms were 9.0 per cent higher than the previous peak of 66.9 billion set in 1955. Total revenues from sales to ultimate consumers amounted to $3.85 billion in 1956, up 11.6 per cent from the previous year's record level. The largest relative gain in revenues occurred in the industrial category, where an increase of 13.6 per cent from the 1955 level of $938 million brought industrial revenues to $1,066 million, the first year to exceed the $1 billion mark.

The most significant relative gain in sales occurred in the residential category, where an increase of 10.1 per cent to 24.6 billion therms reflected, among other factors, service to 1.37 million new gas heating customers and the impact of colder weather than in 1955. Natural gas represented a higher proportion of total industry operations than heretofore, with 96 per cent of industry sales and 89 per cent of industry revenues being attributable to natural gas operations.

For the first time, total miles of main exceeded the half million mile mark, reaching a year-end total of 524 thousand miles. The annual increment of 28,450 miles during the year represented the largest one-year gain in the industry's history. Of the year-end total, more than 324 thousand miles represented distribution facilities, while 152 thousand miles were devoted to transmission and 47 thousand to the field and gathering operations of utilities and pipelines. Construction expenditures during 1956 aggregated $1.55 billion, while it is forecast that 1957 will achieve a new record level of $2.13 billion, and the four-year period 1957-1960 will require the expenditure of $8.7 billion of new construction money compared with $5.3 billion for the most recent four-year historical period 1953-1956.

Proved recoverable reserves of natural gas at the end of 1956 amounted to 237.8 trillion cubic feet, a new record. The increment over the previous year, equivalent to 14.1 trillion cubic feet, represents the largest annual gain since A. G. A. initiated the preparation of consistent annual reserves estimates in 1946. This was achieved in spite of record net production during the year of 10.9 trillion cubic feet.

Net income of the entire industry amounted to $619 million during 1956, another new record level and 18 per cent higher than the total in the previous year. Tax payments during 1956 aggregated $763 million while interest on long term debt equalled $220 million. Total gross book value of investment in utility plant at the end of 1956 amounted to $14.19 billion, and the industry had total assets of $17.4 billion.

Total employees at the end of 1956 aggregated 202 thousand, thus passing another milestone for the first time. Total payroll amounted to $991 million, with an average pay per employee equivalent to $4,900. Since the average 1946-1950 period, pay per employee has increased 56 per cent compared to increases in the cost of living of 20 per cent, thus providing significant advances in real wages for gas company employees.

SALES OF GAS AND ELECTRIC RESIDENTIAL APPLIANCES DURING JUNE 1957

(WITH PER CENT CHANGES FROM THE CORRESPONDING PERIOD OF THE PRIOR YEAR)

	June		May			
	Units	Per Cent Change	Units	Per Cent Change	Units	Per Cent Change
RANGES[a]						
Gas	157,000	−15.2	155,700	−13.3	813,600	−10.0
Electric	n.a.	n.a.	93,600	−27.1	612,400	−18.8
WATER HEATERS						
Gas	215,000	−14.5	233,600	− 4.4	1,121,500	−10.4
Electric	n.a.	n.a.	71,500	−10.1	322,200	−17.7
GAS HEATING						
Furnaces	54,600	−22.2	52,900	−17.1	248,700	−12.4
Boilers	8,200	+10.8	6,600	+ 8.2	28,800	− 2.7
Conversion Burners	10,900	−30.1	8,500	−29.2	39,400	−16.4
OIL FIRED BURNER						
Installations	36,779	−10.4	37,103	−14.2	193,496	−13.5
DRYERS						
Gas	n.a.	n.a.	10,900	−27.7	127,600	−11.8
Electric	n.a.	n.a.	20,700	−48.6	289,700	−28.2

[a] Includes Built-Ins.

GAS SALES TO ULTIMATE CONSUMERS BY UTILITIES AND PIPELINES DURING MAY

(MILLIONS OF THERMS)

	1957	1956	Per Cent Change
Month of May			
All types of Gas	5,753.5	5,663.6	+ 1.6
Natural Gas	5,592.7	5,361.3	+ 4.3
Other Gases	160.8	302.3	−46.8
Twelve Months Ending May 31			
All types of Gas	73,299.1	70,187.9	+ 4.4
Natural Gas	70,832.6	66,530.8	+ 6.5
Other Gases	2,466.5	3,657.1	−32.6
May Index of Monthly Utility Gas Sales (1947-49 = 100)	223.7	220.2	+ 1.6

PERTINENT BUSINESS INDICATORS, JUNE

(WITH PER CENT CHANGES FROM CORRESPONDING PERIOD OF THE PRIOR YEAR)

	June			May		
	1957	1956	Per Cent Change	1957	1956	Per Cent Change
Industrial activity (1947-49 = 100)	143	141	+1.4	143	141	+ 1.4
Consumer prices (1947-49 = 100)	120.2	116.2	+3.4	119.6	115.4	+ 3.6
Housing starts, Non-farm (thousands)	97.0	107.4	−9.7	102.0	113.7	−10.3
New private construction expenditures ($ million)	3,012	3,030	−0.6	2,808	2,839	− 1.1
Construction costs (1947-49 = 100)	159.9	153.4	+4.2	159.2	152.8	+ 4.2

Says trends in conforming tax accounting with corporate accounting could harm regulated industry

Watch conformance in accounting!

By HAROLD H. SCAFF
Vice-President
Ebasco Services Incorporated
New York, N. Y.

Accounting trends of conforming income tax accounting with corporate accounting and the process of rate regulation with corporate accounting will bear close scrutiny by accountants, and particularly accountants in gas and other regulated industries. If the proponents of the conformance ideas were ever successful, great harm could result to the regulated industries, to our economy and even to the integrity of accounting principles.

The idea of conforming income tax accounting with corporate accounting is not new. Accounting magazines have discussed the subject pro and con for many years. In 1956 at a meeting of the Taxation Committees of the American Gas Association and the Edison Electric Institute, the following was proposed:

"There is much to be gained and nothing to lose by conforming tax accounting to commercial accounting. The revenue cost of the change-over can be regulated by the terms of enabling provisions: it is a mere formality to be worked out in its details.

"We can fill an active role in bringing about the adoption of commercial accounting principles for tax accounting purposes. We have both a right and a duty to make ourselves heard in this matter and should do so while the opportunity is present.

"The American Gas and Edison Electric Associations should take an active part in the presentations which will be made to Treasury officials and to the Congressional committees in support of the adoption of statutory provisions bringing commercial and tax accounting more nearly into alignment."

"The idea of conforming income tax accounting with corporate accounting is not new," the author reports

Corporate accounting determines the financial status of a business enterprise. It assists management in the operations of the business and informs the owners and others of the financial results. It is based on accounting principles that are generally accepted by the professional accountants, as well as by the managements of business enterprises. These principles are flexible to a degree and they must remain so to permit the exercise of judgement which is so essential in the accounting process.

Taxation obtains revenues with which to carry on the functions of government. It is accomplished by means of tax statutes which are directive and coercive. Ideally, anyone applying the law to the computation of tax liability should come out with the same exact answer. Taxation strives for an equitable assessment of the burden.

While taxation is concerned with obtaining revenues to operate the government, the Internal Revenue Code is not an objective, revenue-raising set of rules. Both in the statute and the regulations, policy and expediency exert influence. In these laws and their interpretation there are obvious evidences of influence by considerations of economic policy, social policy and revenue requirements.

As examples of the influence of economic policy, without logical sanction of accounting principles, the provisions of the tax laws relating to LIFO valuation of inventories, accelerated depreciation, and percentage depletion, can be cited.

Social policy naturally is more evident in personal income taxation than in corporation income taxation, but we can still cite the non-deductibility of certain types of contributions for tax purposes which accounting principles would permit. The strong influence of revenue requirements is obvious in the retroactive repeal of the provisions of the 1954 Internal Revenue Code pertaining to the accrual of future expenses for the reason that the loss of revenue would have been substantially greater than anticipated when the Code was adopted.

It is doubtful that the accounting profession could survive the conformance of income tax rules with accounting principles. Accounting principles cannot

An address given by Mr. Scaff at the 49th Annual Convention of the Southern Gas Association held April 29-May 1 this year in New Orleans.

govern tax laws in our present political, economic and social environment. In practice, tax laws would dictate and establish accounting principles.

Accountants might advise, but tax laws are written and enacted by legislators. Moreover, they are interpreted by the courts. In effect, accounting principles would be established by politicians and lawyers, influenced in their actions by external considerations.

Accounting principles, so determined, could not respond to experience and circumstances, but evolution and change necessarily would await fiscal and political expediency. With legislative and judicial influence governing the rules to which accounting principles conform, accounting judgement and interpretation, and hence the professional character of accounting, would vanish.

I am not opposed to changes in the tax laws to agree with common sense, and it is to be hoped that accounting principles make sense. But there are two distinct problems.

The first is the basic conformance of accounting principles and tax laws, such as in connection with the matching of revenues and costs to the end that gross revenues will not be taken for income taxes before allowance is made for the cost of the future obligations in payment for which the money was received. This basic conformance of tax accounting with the principles of financial accounting is not to be endorsed merely because there is conformance, but because in these cases the accounting principles involved conform to equity and fiscal practicability.

The second problem concerns the deliberate departures of the tax code from accounting principles; that is, provisions which have nothing to do with principle —usually relief provisions. These include accelerated depreciation, percentage depletion, LIFO inventory valuation, and such other special allowances given for reasons having nothing to do with accounting principles.

Take accelerated depreciation, the declining-balance method, for example: Would you say that prior to the 1954 changes, use of the declining-balance method at a rate not exceeding one and one-half times the straight-line rate represented a sound accounting principle, but that since the 1954 revision, accounting principles have expanded to permit this method at twice the straight-line rate? Or would anyone contend that sound accounting principles permit accelerated depreciation to be applied to properly acquired or built since, but not to property acquired or built before Jan. 1, 1954? Can both the straight-line method and one of the optional accelerated methods measure the actual depreciation of the property with equal fidelity? Or, is the taxpayer expected to adopt the method which most faithfully measures his depreciation, rather than the method which the code offers to minimize his tax liability?

For the most part, these departures of the tax code from strict accounting principles are expedient and equitable. However, under our present heavy burden of taxation, they point to an inevitable distinction between the computation of tax liability and the records of such computations, on the one hand, and the principles of corporate accounting and the financial accounting records, on the other.

Consider next the question of conforming the processes of rate regulation with corporate accounting. This idea became quite prevalent during the Roosevelt era in certain regulatory quarters, and has continued down to date.

High level support

To show that the idea had high level regulatory support, I want to refer to a paper, *Responsibility of Accountants in a Changing Order,* presented by Leland Olds, chairman of the Federal Power Commission, at the 53rd Annual Meeting of the American Institute of Accountants, held Oct. 13-18, 1940:

"The work of the Federal Power Commission's bureau of accounts, finance and rates foreshadows the contribution which the accounting profession can make to restoring the conduct of our economic system to the controls of social responsibility. It is directed to making regulation effective through establishing a sound basis of accounting control. Actually, and this is the expression of a hope which is gradually being realized, it affords a basis for self-regulation by corporations directed by men who have come to recognize the nature of their trusteeship."

Pricing utility services is an economic, rather than a cost determination problem. In non-regulated industry, competition and demand establish the price level. The producer must control his costs to allow a margin of profit at the prices over which, barring monopoly, he has little or no control.

In regulated industries, regulation acts as a substitute for direct competition and sound regulation simulates such competition. In order to provide equity to both the customer and the investor, regulation must permit rates which recognize the value of the service, which are high enough to encourage new capital investment, as well as securing the integrity of capital already committed to the enterprise, and which are low enough to promote the full use of the service regulated.

Utility service is not without competition. Your gas service must compete with electricity, oil, coal, and other fuels.

More significantly, utilities are in direct competition with other industries and institutions, including government, in raising capital to provide adequate service to the expanding economy of its service area. Their demand for capital is relatively greater than the demand of most non-regulated industries. Because of their obligation to provide all of the service required by customers, their demand for capital is more insistent.

To price services, which in utilities means the establishment of rates, one must recognize value, not just costs alone. Accounting necessarily is based on costs which are previous values. When prices have risen, a cost instead of a value rate base confiscates the investment of existing investors by dilution of their equity when new money is raised. A cost rate base carries the risk of such future dilution.

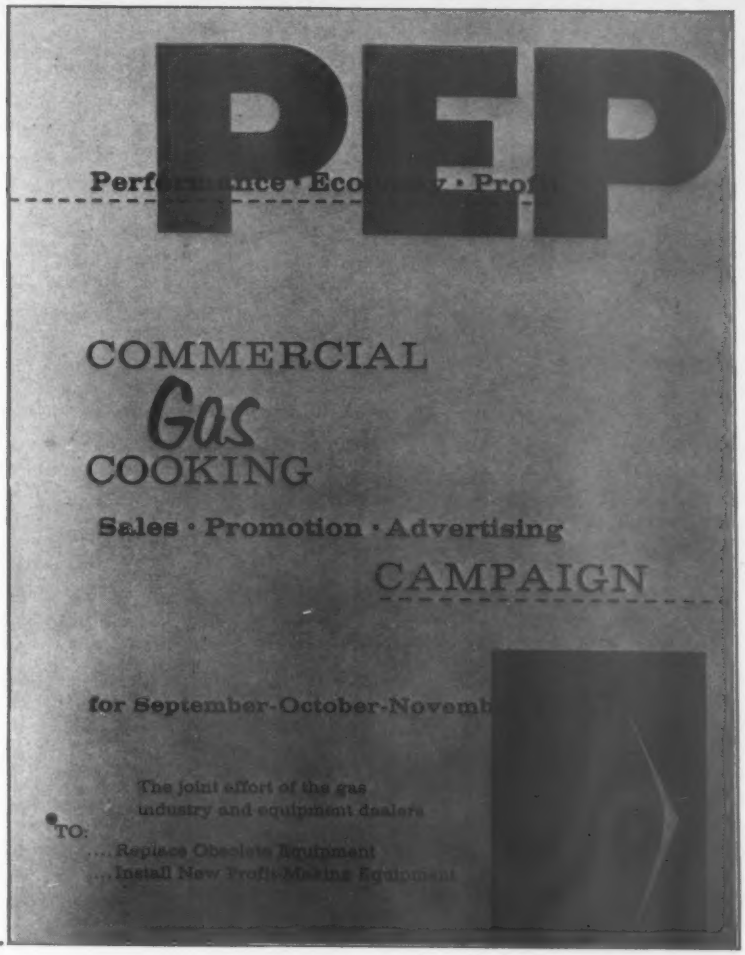
The very fact that non-regulated industry in times of inflation can maintain the purchasing power of the investors' dollar by pricing on the basis of present values, while the utility, if tied to historical cost, cannot, creates a risk which might well impede utility financing, unless regulatory bodies recognize the basic economic facts of life.

If the proper rate base is value, it follows that for rate-making purposes depreciation must be based on value, rather than on cost. In time of inflation, depreciation based on cost applied to a fair value rate base would overstate value. In time of deflation, the use of depreciation based on cost would understate value. On the other hand, the corporate financial accounts should be based on cost, both for assets and for depreciation.

Rates are made for the future, not for the past. Accounting in its generally accepted present form is historical; it records the past. In rate making, this

(Continued on page 34)

Commercial men open PEP drive



Commercial gas men, dealers and manufacturers this month launch a two-fold drive to replace obsolete commercial cooking equipment with new automatic gas appliances and to install new profit-making equipment where needed in inadequately equipped kitchens.

It's the annual American Gas Association-sponsored PEP campaign (Performance, Economy, Profit) which is scheduled to run September through November.

This year's promotional, selling and advertising program has been bolstered by some interesting possibilities. Officials of the National Restaurant Association have estimated that equipment in a vast share of the commercial kitchens is woefully inadequate and obsolete. They also report that most restaurants have insufficient cooking equipment or else their equipment is so inadequate that they fail to gain adequate profit returns.

The theme of the 1957 campaign is "Gas Gives Top *Performance,* Greater *Efficiency,* and Higher *Profits.*"

It is designed to aid the gas utility. A review of the sales campaign accomplishments of companies representing 50 per cent of the industry's meters demonstrated that the dollars invested and the time spent on the campaign produced exceptionally high returns. Compared to other sales and promotional efforts, and in view of the profitable commercial cooking rates, the PEP campaign might be considered as one of the leading revenue producers of all promotional projects.

A point in favor of the program is that it is not forced or contrived. The market for selling new, modern, efficient gas equipment is as vast as the number of commercial cooking accounts. And apparently, the market is now ripe for exploitation.

Every gas company, regardless of size, sales policy, manpower, or budget, can use all or a part of the material now available. All program details have been planned and tailored for the use of individual members as a local program. It is flexible to allow a company to follow the pattern either wholly or in a modified way.

The Gas Appliance Manufacturers Association is again giving its support to the PEP campaign in several ways. Current plans include:

1. Placing an editorial-advertising promotion in *Restaurant Equipment Dealer* magazine's September issue.
2. Participating actively in local campaigns.
3. Supplying sales promotional material for gas companies to mail or otherwise distribute to prospects.
4. Promoting a sales and promotion achievement award contest open to all companies participating in the campaign, with plaques to be awarded to three gas utilities.

Sales material, sales contests, and de-

Entirely new to the PEP campaign is the personalized reply-o-letter for each utility's mail selling program

tails of the campaign program are available in the campaign kits.

Included in the printed sales promotional material are:

1. A low-cost Reply-O-Letter direct mailing series (the real backbone of the sales campaign).
2. Manufacturers' promotion material.
3. New A. G. A. promotional material including equipment proposal folder which adds dignity to financial presentations on proposed equipment installations.
4. *Gas Magazine, Inc.,* printed sales.

The campaign program folder lists (1) planning guide, (2) suggested activities, (3) general information, and (4) ideas.

Four sales contests planned are:

1. GAMA achievement award contest for utilities.
2. A. G. A. achievement award contest for restaurant equipment dealers.
3. "Oldest appliance" contest for dealer salesmen.
4. Incentive prize contest program for dealer salesmen.

Accounting

(Continued from page 32)

applies to operating expenses as well as to rate base and depreciation.

Expenses must be adjusted to levels which may be anticipated during the future period for which rates are established. For example, when they can be anticipated with reason, allowances are needed for expected changes in wage rates and prices. Then again, an allowance is needed for what are often excluded as "non-recurring expenses," but which are incurred almost every year although the nature and amount may be different.

It also would seem appropriate that rates made for the future should provide a fair return on the rate base anticipated for a reasonable future period, rather than on the existing rate base.

In establishing the value of the property and the revenues and expenses, accounting is essential for rate regulation. However, it is a starting point, not a conclusion. The plant account and depreciation reserve can never form an economically sound rate base and the utility income can never properly represent return on investment.

While the proponents of conforming the process of rate regulation with corporate accounting are mostly members of certain regulatory bodies, nevertheless, in recent years, certain members of the gas and electric industries have through their actions encouraged such ideas and conformance.

Following Congressional approval of the use of the five-year amortization, many utility companies took advantage of the provision and amortized substantial amounts of newly constructed plant over a five-year period for tax purposes. More recently, Congress approved the use of accelerated depreciation through the declining balance or sum of the years-digits methods. A large number of utilities, likewise, took advantage of these methods of accelerating depreciation deductions in order to legally minimize tax liabilities.

A substantial number of the companies using the amortization and accelerated depreciation sought, through state and federal regulatory commissions, orders enabling them to *normalize* their taxes by including, in operating revenue deductions, amounts equal to that by which taxes on income payable are lower for the period because of the use of the accelerated amortization and depreciation.

The intent of such regulatory action was to bring tax expense in line with amounts that would have been due the federal government had the companies chosen not to amortize emergency facilities or to accelerate depreciation. The income account would be *normalized* and hence would not be inflated because of amortization or accelerated depreciation.

A number of companies in seeking this accounting treatment of the amortization and accelerated depreciation did so in the belief that the normalizing of taxes, and hence income, would influ-

ence the treatment of such items for rate-making purposes. The companies hoped that by this action they would not be confronted with the necessity in a rate case of having to pass these amounts on to their customers.

Had these companies believed in the intentions of Congress in making the use of amortization and accelerated depreciation available to utility companies, as well as to all other companies in our industrial economy, and had they believed that the processes of rate making are economic, rather than a cost determination, there would have been no necessity in the least for any deferred tax accounting. The entire matter of amortization and accelerated depreciation would be treated on its merits in rate cases and the treatment would not in any sense have to follow, nor be based upon, what the utility had done on its corporate books of account.

In seeking the normalization of taxes under the amortization and accelerated depreciation allowances, inconsistencies are created in a good many instances where companies still have differences between the amounts of depreciation accrued for corporate accounting purposes and the amounts claimed for tax purposes on plant and property not affected by the use of amortization and accelerated depreciation.

In these instances, the companies are normalizing taxes, which on one hand arise from differences between depreciation accrued for corporate purposes and that claimed for tax purposes on an accelerated basis. The companies are not, however, normalizing taxes where differences arise from merely claiming more straight-line depreciation for tax purposes than the amounts accrued for corporate purposes.

These inconsistencies take on even greater proportions, when consideration is given to the differences, some fairly substantial, that exist between the book depreciation reserves and the amounts of the accumulated depreciation allowances claimed for tax purposes.

No effort was made by the utility companies, public accountants or regulatory bodies to normalize earnings during the many years that the cumulative differences between tax and corporate depreciation were building up. The annual differences in many instances were more significant than the differences that are being incurred today under the liberalized methods of depreciation under the Internal Revenue Code of 1954.

It should be evident that accounting must serve many diverse purposes. It represents basic data designed to reveal directly, as well as it may, the financial condition of the accounting entity and the results of its operations during the fiscal period. Indirectly, the data serve as a springboard for calculations for many other purposes which include among others, managerial planning and control, cost determination, liability for income taxes, and pricing; the last in the case of a regulated industry includes rate regulation.

Certain accounting principles, such as the matching of income and expense, could well be observed in income tax rules, but the corporate financial statements hardly afford an equitable basis for determining income tax liability. At one time, Federal income tax regulations required that depreciation claimed for tax purposes be that recorded in the books of accounts. The inequity of such a requirement was demonstrated convincingly by litigations and the idea was abandoned. On the other hand, the privilege of using LIFO basis of inventory valuation was made contingent on its use in the accounts in order to expedite administration of the provision, and the influence of tax minimization is so strong that acceptance of its use in accounting virtually has been forced on the profession, although there are very few accountants who would admit its compatibility with accounting principles.

With respect to rate regulation, the prospect of conformance of corporate accounting is even more alarming. As I have tried to demonstrate, both the indirect competition with alternative services in sales, and the direct competition with other industries and institutions in financing, make values, rather than costs, the criterion of adequate compensation of the investor.

Moreover, with respect to the actual return, rates are made for the future; so future revenues and expenses, rather than historical accounting results, should be considered.

It appears that we have, at times, been too ready to simplify and have not always considered the ultimate cost to our companies and industry. If this paper is successful in pointing out how fatally exorbitant the ultimate cost of such simplification and conformance would be, it will have served a good purpose.

Oil Heat Institute launches new anti-gas campaign

THE OIL HEAT INSTITUTE of America has organized a new anti-gas campaign.

The campaign, which aims at the promotion of oil heat at the expense of the gas industry, uses an attack on Type B gas vents in the hope of inspiring local ordinances against their use.

Type B vents, which are specifically designed to vent gas appliances, are approved by Underwriters' Laboratories and recognized by A.S.A. Standard Z 21:30 and by most building codes. Outlawing such vents would automatically increase the cost of many gas installations.

Outlawing them would also eliminate the possibility in many instances of installing such gas appliances as recessed wall heaters, gas unit heaters, horizontal furnaces and space heaters and would cut into the load potential of gas utilities.

The kit that OHI has made available to its local chapters includes a booklet titled "Shocking But True! . . . Our Community Lacks a Safe Chimney Law!"

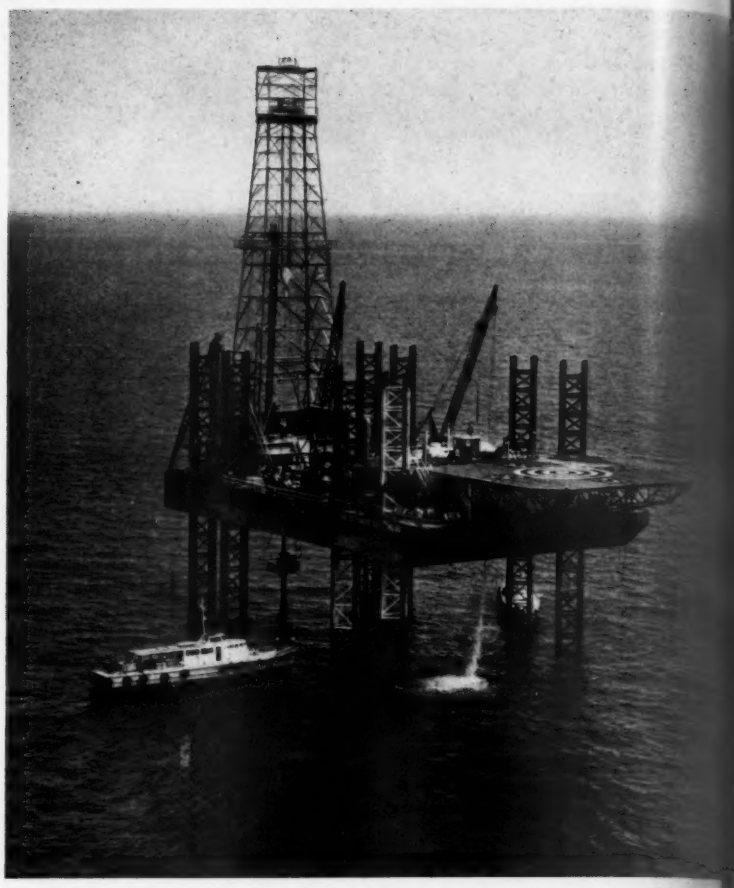
The booklet includes such statements as . . . "If a homeowner does not have an all-purpose chimney he is indeed a *Captive* of the gas industry and is the possessor of a vent which is potentially *Unsafe.*"

On another page the booklet reads . . . "If many hundreds of miles away there is an explosion or other pipeline failure . . . or if there is an unexpected drop in pressure . . . *No Gas! No Heat!*"

Then it goes on to say . . . "If there is a disruption of service anywhere along the 1500-mile gas line due to strikes, fire, flood, acts of God, etc. . . . or even if the poor guy just can't pay his gas bill for a few months, he's stuck. If the house were equipped with a regulation all-purpose chimney he could turn to coal, oil, or even wood . . . but his inadequate vent won't take them."

In addition to the "shocker" booklet, the OHI kit includes a complete outline of how to organize and carry on a local campaign to outlaw Type B Vents, sample releases to be sent to local newspapers, anti-gas questions and answers for radio interviews, prepared letters for mailing by individuals to city councilmen, canned statements to be endorsed by veterans groups, neighborhood associations and other organizations, and last but not least, a sample ordinance *Which Would Require* an "all-purpose" chimney in all new homes.

Problems in measuring off-shore gas



Travel, only one of many problems faced in the operation of off-shore fields such as the one above, often is a major difficulty. Docks sometimes are located far from fields

By E. L. DEKINDER

Phillips Petroleum Company
Bartlesville, Oklahoma

Oil and gas producing companies are continuing to develop, in greater degree each year, the potential off-shore fields in the embayments and the Gulf of Mexico along our southern coast. The operations require a considerable financial outlay, and problems inherent with the measurement of the gas and liquid streams are multiplied over corresponding operations on land.

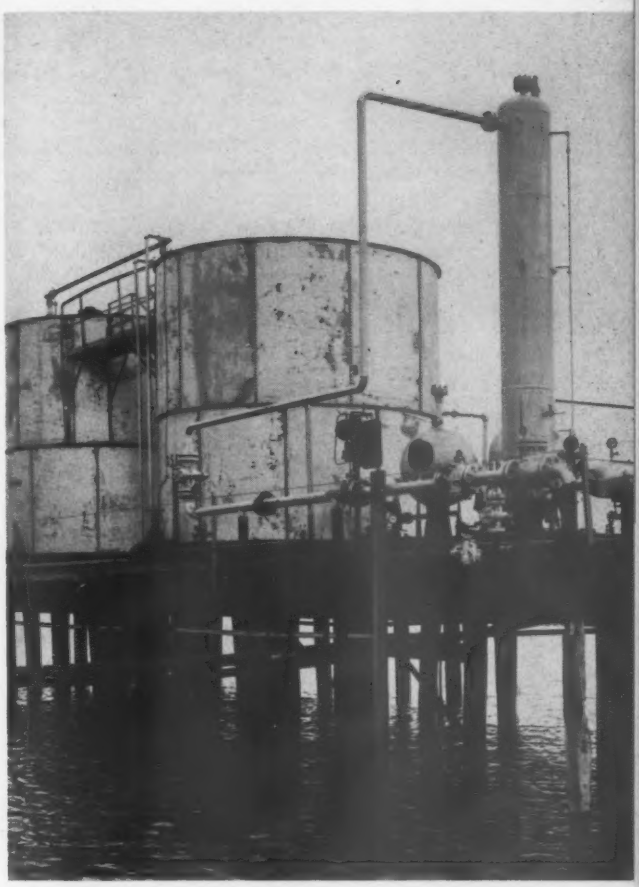
A principal problem is transportation to and from the point where the measurement is to be made. Travel plans are arranged with the transportation supervisor, and must be made carefully and in considerable detail. The boat usually leaves the dock around 6:30 a.m. and the ride to the platform may take up to eight hours. Platforms often are located only a few miles from the dock, but in other instances they may be as far as 80 miles from shore.

There are usually only a few boat docks available for the transportation of material and personnel to the platforms. This means that a location only three or four miles from shore may necessitate a boat ride of 40 to 50 miles. Another problem is "catching the boat" since the boat dock is frequently situated on the other side of a bayou or intracoastal canal. The opening of one or more drawbridges may call for 10 to 30 minute delays. Thus, to assure that a definite appointment is met, an off-shore gas man may have to start his day at 4 or 5 a.m.

Weather is another problem. When plans are made, the weather may be favorable, but by the time the boat dock is reached, a squall or storm may have developed resulting in a waiting period of several hours. Sometimes one goes aboard and must wait a storm out on the boat, several miles down the coast.

When the platform is reached, and

This is Southern Natural Gas Company's main pass receiving station 75 miles southeast of New Orleans. It measures gas from the main pass field off-shore



Here is a close-up of an off-shore field for a producing company. Operations such as this require a considerable financial outlay

especially during rough weather, it is often quite a problem to unload. Most platforms have a crane and cargo net which, when operated from the platform, provide an easy means of unloading material and personnel if the Gulf is calm; if not, it is necessary to "jump for it" by means of ropes swung from the platform. The risks inherent therein are such that a requirement is written into the job description to assure that personnel selected are agile enough to get from the boat to the dock or vice versa. The platform height above the water is about 50 feet, and it is consequently necessary that a person be able to climb, in order to handle the job properly.

Another transportation hazard is seasickness; personnel subject to this malady will have little interest in measurement problems until they again reach solid ground.

The helicopter is another method of transportation which is in limited current use, but which will no doubt be used more in the future. The location of the helicopter base is usually more accessible and convenient than the dock, and much time is saved by its use. With the increasing ability of weather stations to predict atmospheric conditions, the hazard of foul weather also can be reduced. In addition radio homing devices are being developed which will permit a plane to find the platform in all kinds of weather.

While the cost of transportation by boat is great, travel expense by helicopter is greater. A cost study is being made based on a helicopter hauling light loads and less equipment as compared with boats with their greater load capacity. The use of the helicopter is further limited by the fact that some platforms do not have a good landing area available. A satisfactory area must be provided since air currents are strong and changeable, making operations hazardous even under the best conditions. Considering these limitations, it remains that boats are still necessary to handle most of the equipment.

Measurement problems begin on the platform because a single trunk line from that point to the shore transports a combination of both the gas and liquid collected by several companies. Gas and liquid streams must be measured separately. One platform may have several wells drilled directionally from its surface, and since the trunk lines from any one platform must carry not only the product stream from that platform, but the streams from several other platforms of different ownership, it is necessary for personnel from several different companies to work in conjunction with one another.

This involves the calibration of meters and the running of G.P.M. and charcoal tests. It is necessary to take liquid and gas samples to determine the composition of each flow stream so that proper disposition of the combined flow stream can be made after it reaches a separation station on land. It is desirable, when working with other companies, to have the same type of equipment installed on all the platforms delivering into the common line. This has several advantages in that the men of different companies can check each other's equipment and facilitate their operation of the units. The metered volumes of gas and liquid from each platform are used to establish percentage figures which are applied to the total liquid and gas volumes at the separation station on land.

If the gas pressure at the platform is high enough, a cold temperature separation unit is used to separate the gas and liquid and to remove the water. Otherwise, a conventional separator and dehydration unit utilizing glycol or dry desiccant is used. The liquid and the gas, after being separated and dehydrated, are measured and then combined into the main line going to shore.

Freezing problems are encountered in the meters and in the line to shore as well. Freezing problems in the meter occasionally result since the pressure necessary to deliver a full flow stream thirty or forty miles to shore and into a transmission line or plant at 700 or 800 pounds, requires that the pressure at the platform will be about 1200 pounds. The formation temperature of dehydrates at this pressure is around 70 degrees.

To alleviate some of the difficulty resulting from freezing, meters are protected by using meter houses with solid floors. Since the surface of most platforms consists of an open grating, there is considerable possible corrosion from salt water spray. A solid flooring in the meter houses also prevents the loss of small special tools which otherwise might be dropped through the open grating. In many instances, the possibility of losing such special tools required for meter repair would be a minor catastrophe, since their replacement could only be obtained at some distance from the platform.

Liquid meters

Liquid meters give the most difficulty because of freezing. Some relief from this problem may be obtained by using seal pots filled with glycol or alcohol. However, this anti-freeze tends to absorb water and hydrocarbons, becoming ineffective in a few days. Since the meter men ordinarily go out to the platform only once a month, they must depend on the switchers and other personnel to service the meter when necessary, otherwise the meter man would have to make a trip once a week just to refill the seal pots.

Either mercury or mercuryless type meters may be used; each type has its advantages and disadvantages. The mercury meter requires that a stock of mercury be maintained on each platform, or that some be transported by the meter man each trip. This is something of a problem since every effort is made for personnel using boat or helicopter to travel as lightly as possible. Due to freezing and incorrect operation of the manifold valves, mercury is subject to emulsification or loss. Another common occurrence is the disappearance, for various reasons, of mercury which is left on the platform.

The mercuryless meter by its inherent construction avoids these difficulties; however, these meters sometimes fail and a bellows unit must be replaced. It is good practice to store one such basic meter part on each platform. The mercuryless meter has an advantage in that it can be abused by improper manifold valve manipulation without causing meter failure. The mercuryless meter may be piped so that any condensate will drain out of the measuring chambers and into the meter tube, thereby increasing the accuracy of measurement.

In some instances, the gathering line from the platform to the separation station freezes up. Should this happen, one common method of clearing the line is to shut in the wells at the platform and blow the line on shore. This may cause a great loss of gas and liquid since some 20 or 30 miles of 10-inch or larger line may be involved. From this it can be seen how necessary it is that good measurement be obtained at the platform so that each company's percentage of transported fluid is known when each flow leaves its platform.

From this account of the problems coincident with gas measurement in offshore operations, it can be seen that all of those corresponding to land operations are encountered, together with the many additional problems which are peculiar to marine developments.

Michigan Gas Association elects Ludwig

GEORGE E. LUDWIG, general manager of Michigan Consolidated Gas Company's Muskegon district, was elected president of the Michigan Gas Association June 24 at its annual meeting, which was held at Mackinac Island.

George Ludwig

Named vice-president was L. L. Perry of Three Rivers, vice-president and general manager of Michigan Gas and Electric Company. Re-elected secretary-treasurer was Milton G. Kendrick, sales manager of Michigan Consolidated's Ann Arbor district.

The retiring president, W. R. Carlyon, division manager for Consumers Power Company in Lansing, was elected to the board of directors along with J. B. Simpson, assistant general supervisor for Consumers in Jackson, and D. B. MacDonald, Saginaw division manager for Consumers.

Mr. Ludwig started with Michigan Consolidated in Grand Rapids in 1925, and was named to his present post in 1950. He served as vice-president of the Michigan Gas Association last year. He is a member of the American Gas Association.

Directors re-elected

ALL MEMBERS of the board of Northern Illinois Gas Company were re-elected at the company's annual meeting held in Aurora in June.

Northern Illinois President Marvin Chandler, commenting on a board action taken earlier this year, explained to stockholders that a resolution had been adopted providing a definite policy for the retirement of directors. The resolution stated that no person should be a candidate for election or re-election to the Northern Illinois board in the third year following the year of his retirement from his primary occupation, or in the year in which he becomes 70 years of age—whichever occurs first.

The women know what they want

By MISS ANNABELLE HEATH

Assistant Administrator
Housing and Home Finance Agency

Have you ever played one of those word association games? Have you ever voiced immediately what popped into your mind in response to a word spoken to you? Take the word "laundering," or "washing and ironing."

I wonder how many millions of women—of all races and nationalities and ages, in all the periods of history—answered "drudgery" as their own connotation of "laundering"—no matter what their language.

In contrast to the centuries past, it has been a relative yesterday when man harnessed new sources of energy to other products of engineering knowledge to save the backs and arms of his womenfolk. It is difficult to think of another field of woman's work where so little was done for so long to ease the labor and the drain on time.

Today's homemaker has what all her sisters of history were denied: miracles of machinery to remove most of the sweat and tears of family laundering. The housewife of half a century ago could hardly have dreamed of today's home washers and driers and ironers. To her it would, perhaps, have seemed perfection.

As a practical matter, though, perfection is relative. And the modern housewife, ably abetted by her equipment, seeks greater efficiency and ease in the use of her motorized helpers. This appears to be the current point of emphasis on the features that women want in home appliances. This was one of the facets of the Women's Congress on Housing that we held in Washington in April, 1956.

There were 103 women from all parts of the country at the congress. They were organized on a geographical basis at nine tables. A tenth table was made up of women from extreme parts of the country. This table was set up as a kind of bench mark to test whether there would be any comparability of agreements between geographic groups and a composite national group. The degree of agreement, particularly with regard to space and its arrangement, was remarkable. But perhaps of equal importance was the record of reasons "why" the women want specific areas, locations, and relationships within the house.

In order to understand the breadth and depth of agreement of the women at the congress, it must be recognized that the delegates were representative of families with 3, 4, 5 and up to 10 children, in the extreme cases.

Let me give you some statistics on what has been happening to family sizes. These are from the Bureau of the Census. Between 1948 and 1953 the number of:

Second births increased by 7 per cent
Third births increased by 38 per cent
Fourth births increased by 52 per cent, and
Fifth births increased by 42 per cent

Figures for 1954 (the latest available) show a continuation of the trend.

It should not come as a surprise then that space was the prime consideration of this group of women. But it is not just more space that the women want. It must be properly located space. Space and equipment must be arranged so as to permit a coordination of housekeeping tasks.

The women want houses to serve them in achieving as full an opportunity as possible for the personal development of each member and the family as a group. To do this the house must be planned so as to permit the homemaker to organize her activities in a manner that will gain some time from the drudgery of household chores to devote to family, community activities and self-development. Remember, there are no servants.

Some wants of the women of interest to you can be grouped into several general headings:

1. Space Arrangement—Let's start with the kitchen. The women say that it is the focal point of the house. It is the most important room and deserves priority in considerations of location. The majority want it looking into the rear yard and facing in a southerly direction.

Laundering is indicated as the next important household task after those of meal preparation, serving and clean-up. Equipment location rates high in importance. For the majority, maximum convenience locates the laundry on the first floor—central to the bedrooms, kitchen and outdoor drying area. A location near the bedrooms is desirable on the basis that most items requiring laundering originate there.

A location near the kitchen is essential. Many women state that because of the problem of baby care, they cannot start laundering until after the break-

Excerpts from a talk given by Miss Heath before the Eastern Gas Sales Conference of the American Gas Association, May 6, in Pittsburgh, Pennsylvania.

fast dishes are washed, if the laundry is not adjacent to the kitchen. This wastes time. But they do not want to do laundering in the kitchen. They say that soiled clothes and food just don't mix.

This preferred location of the laundry adjacent to the kitchen seems to be a reversal of a trend in some areas in recent years to locate the laundry in the bathroom or near it in a corridor. For families with no children or only one child, this location may continue to be desirable. But it is with these modern families with more children that the Women's Congress was concerned. The women present a reasonable case for the next-to-kitchen location for the laundry. With the equipment adjacent to the kitchen they can start laundering and while the automatic washer is operating, they can clean up the breakfast dishes, start luncheon and supervise the baby, all simultaneously.

Efficiency stressed

This matter of efficiency—of being able to organize work operations was stressed again and again by the women. With the trend toward more children and in the absence of servants, the task of household management could be one of day-long drudgery, with no improvement in the lot of the "blooming miss," and with no time left for the real important functions of family living—planning special events for the family, helping the children in their process of learning and growing up. Time to share interests and activities with husband. Time to devote to self-improvement—to participate in community activities. To achieve this, the place where they work and the tools they work with must be arranged so that all operations may be efficiently organized.

Let us take the laundry as an example. To be efficient, they want all activities connected with the care of clothes centralized. They want to use the laundry room not only for automatic washing and drying, but also for ironing, mending clothes, cutting garments from patterns and for general sewing. They want the laundry room to have good light, both natural and artificial.

The majority of the group from the New York metropolitan area and New Jersey was exceptional, in that it found a combination washer and dryer equally acceptable to separate appliances. A minority of this group would not accept combination equipment, on the basis that with separate equipment, at least one appliance can still be used, when either one requires service adjustments or repairs.

All other groups expressed a preference for separate washers and dryers.

All groups desire a laundry tray in addition to automatic equipment, for soaking some types of clothing and for dyeing.

Automatic ironers, generally, are considered desirable but not necessary.

Many women would have the laundry room serve as the rear or family entrance; as a buffer area to the rest of the house, where soiled and wet play and work clothes, galoshes and boots may be removed.

Serving as a type of mud entrance and because of water used in laundering, the floor materials should be durable and resistant to moisture stain. Wall finishes should be easily cleaned and water-resistant.

For lower-cost houses, where costs are more important than maximum convenience, other locations for the laundry are acceptable, differing on a regional basis. In the north, where basements are customary, the laundry will be located there and baby will have to be brought along for supervision. In southern areas, it may be located on a rear service porch, at the end of a garage or carport.

Floor space for family activities and storage of possessions, as you are aware, is at a premium. Any square footage that can be saved through compactness of equipment and accessibility for servicing in a minimum of space will be appreciated.

2. Servicing of Equipment—One aspect of the congress that was given considerable publicity was the desire of the women to have a choice in the brands, types and sizes of household appliances.

One of the factors that determined this recommendation was the matter of appliance servicing. The women recognize that a major consideration in the purchase of equipment is the quality and availability of local service.

An item of equipment that is inoperative not only reduces the efficiency of the homemaker but can be costly as well.

Family income spent on servicing reduces the funds available for purchases of additional equipment. In the long run inadequate local service facilities will reduce the volume of manufacturers sales. Women talk about good and bad equipment and service, you know—over a cup of coffee, the back fence, when shopping—most any place a group gets together. Reliable service is a necessity for success in product sales volume.

3. Quietness of Operation—One of the qualities that women want in household appliances is quietness. This does not show directly in the final report. But it is the reason for the request for a door between the kitchen and the laundry or laundry-utility room and for ceiling sound deadening material. In the letters received prior to the congress this reduction of noise was mentioned many times.

4. Easy Maintenance—Of great importance are durable finishes that are easy to clean and maintain. This means, for example, that the parts of the range, burners, drip pans, door handles, etc., should be simple in design for easy cleaning. One woman emphasized this need for plain surfaces that do not collect dust and grime. She said that if designers only recognized that in the process of cleaning, a woman's hands must touch nearly every inch of surface in a house, they would avoid decorative scoring of surfaces which only serve to collect dirt. Anything that reduces the chore of cleaning—clean heating fuels, equipment and distribution systems, easy to clean surfaces, coved and rounded corners, expert workmanship that avoids cracks and corners where dirt and grease may collect—will appeal to the women.

Operating costs

5. Economy—The women are interested not only in the initial costs of houses and appliances, but also in operating costs. Combinations of equipment that can provide the benefits of lower operating costs through lower rates on volume consumption will find approval.

In this brief review of the results of the congress, I have attempted to indicate some general guides that will be of benefit not only in more successful merchandising but also for what the women believe would be product improvements.

In the final analysis it is only by a continuing improvement in the products offered to the homemakers that sustained success and profits are possible. And, I do not mean only improvements that are recognized by engineers; they must also be recognized as improvements by the prospective purchasers—in so many instances, in the case of your products—the homemakers, the women.

This blue ribbon home located near Boston is an example of modernity

A swimming pool behind home is gas heated by a Burkay water heater

This all-gas kitchen played major part in naming home for award

Gas-heated swim pool in award home

The *Saturday Evening Post* has awarded its "Blue Ribbon Citation for a Quality Home" to a seven-room, two-car garage residence in West Acton, Massachusetts. The home uses gas for heating, year-around air conditioning, cooking, water heating and refrigeration. The home is in an area served by the Boston Gas Company.

Most unique part of this split-level house is a 36′ by 18′ Esther Williams home swimming pool heated by a Burkay gas water heater. The pool is at the rear of the home and the heater is in the basement.

The house has a built-in stainless steel Preway gas range in a model kitchen. The Yorktowne cabinets are of natural wood and a Servel gas refrigerator completes the all-gas kitchen.

This completely furnished home, part of a new development, was opened June 23 for public inspection. It is one of 150 homes that will be built in the area by Sunnyside, Inc.

The builders' use of original design, quality materials, and a unique location were the main factors in the selection of the home as a *Saturday Evening Post* prize-winner.

Shortly after the home won this award, another home in the Boston Gas Area was selected as an outstanding home. The new Blue Flame Home at Wayside Acres, Sudbury, received an *American Home* magazine citation for being one of Massachusetts' best home values for the cost.

Industrial relations round-table

Prepared by
A. G. A. Personnel Committee

Edited by W. T. Simmons
Assistant to the Personnel Manager
Philadelphia Electric Company

● **Recreation pays off**—Among the 25,000 American companies which spend over one billion dollars annually on employee recreation programs, the following features found at Minnesota Mining and Manufacturing Company are outstanding:

The membership is voluntary and includes 94 per cent of the company's St. Paul employment.

The company offers administrative help, but does not dictate policy.

Any reasonable employee activity is encouraged.

The recreation is to improve morale among all departments and levels of employees.

When the employees share the expenses, recreation is more valued.

The greater the variety the more workers will be attracted by the program.

Some of the employee activities are as follows:

Among the sports activities: archery, baseball, basketball, bowling, hockey, golf, rifle shooting, softball, table tennis, tennis, trap-shooting, volleyball.

Among the club activities: bridge, cribbage, stamp, craft classes (including boatbuilding), photography, skiing, visiting sick patients.

Among the social activities: picnics, dances, winter carnival.

Among the music activities: band, men's and women's choruses, orchestra.

The 3M club also takes over the United Appeal Drive each year. They have been successful in selling the idea to the employees because the average pledge amounts to a contribution of $1.00 per month from each employee.

1½ million Btu an hour

This gas water heater—if it were operating—would have an hourly Btu input of 1,472,500, says Ruud's Harry Leech (r.). With him are (l. to r.): V. C. Schurman, Ketchum, MacLeod and Grove; George Coulter, Manufacturers Light and Heat; Charles Yost, Peoples Natural Gas

● **Waterless washing**—Employees use a soap-like cream to clean hands at basins set right out on the shop floor. It is convenient, inexpensive, no plumbing to install or drains to clog. But there has always been a big question as to employees' acceptance of the method. Now a report of a study made in a big Midwestern machine shop seems to show that workers like it.

After eight weeks of using a waterless cleaner (SBS-30, Sugar Beet Products Company), 101 shop employees gave these opinions:

Do you favor continuing the use of the waterless cleaner? Yes, 97; No, 4.

How would you rate it compared with soap and water? Superior, 26; As good, 51; Inferior, 24.

Does it have any effect on your skin? Good, 52; No effect, 46; Bad, 3.

The company where the survey took place makes the cleaner available to 3,570 employees at 58 plant stations. The stations do not replace regular service rooms; they supplement them. The favorable response to the survey means that waterless washing will continue at these plant stations.

● **Improving reference checks**—You may want to find more about the Reference Check Merit Rating form. It is much like a performance rating chart. It is a copyrighted sheet that permits the reference source to rate the applicant on 10 factors. The originator of this form thinks it reduces the tendency to over-rate or "average" the appraisal. Write Brewster Company, Box 386, Jackson Heights 72, N. Y.

● **Keep the feet dry**—Sloshing through water (or acid or alkaline solutions) is perhaps not heard of in your location. But if any of your employees ever have to slosh, check the advantages of work shoes made of leather treated with Sylflex, a new Dow Corning (Midland, Michigan) silicone that provides "lasting water repellency without clogging the pores through which leather breathes."

● **Cafeteria that's fully automatic**—The latest in automatic plant cafeterias is a scientifically planned food arrangement that serves a balanced menu at reasonable prices. All of this from vending machines with minimum effort, expense, maintenance.

Soup is on 24 hours a day, seven days a week at this Galion, Ohio, plant of the North Electric Company. But the company stays out of the restaurant business. Selective Vending, Inc., of Mansfield, Ohio, designed the cafeteria layout and operates it. Machines are placed selectively so that traffic flows speedily from the right to left: From coin dispensers and paper trays, through foods, desserts, and beverages, to the automatic bun warmer for sandwiches at the left. The service island in the center of the U-shaped vending area holds condiments, can openers, napkins, straws, disposable cups and bowls, plastic utensils.

The cafeteria is 5,200 feet square, seats 300 of the 500 employees at a time. Cheerfully decorated in gray and red, the room has windows down two walls and a private dining room at the far end. The cafeteria, perched like a penthouse atop the second floor of the plant, is accessible to all employees by two stairways and a service elevator. Yet it is isolated to assure the best in cleanliness and comfortable surroundings.

Variety (33 kinds) is the key to food service in the 10 vending machines. This battery offers three selections of hot and cold sandwiches, three choices of hot foods such as chili, stew, or spaghetti, three types of hot soups, a selection of three chilled salads, plus ice cream, pastry, cold drinks, coffee, tea, and milk.

The company's only contribution to the cafeteria service is space, tables and chairs, utilities, piped-in music, and eight hours' custodian service. Plus a working capital of $1,000 in change daily to keep the coin machines running smoothly.

The caterer installs and services the machines, plans menus, and checks food inventories daily to insure freshness.

● **Court decision**—*Court affirms board support of employer's firing threat.*—The Court of Appeals for the Sixth Circuit finds no problem in affirming a National Labor Relations Board ruling that the Taft Act was not violated by a plant supervisor telling one employee that two workers would be fired if they didn't stop passing out literature and "talking union" on company time.

The court confirms the Board's ruling by way of a one-paragraph order, the essence of which is that "the findings of fact by the Board are supported by substantial evidence on the record considered as a whole. . . ."

The Board said the supervisor's remark did not violate the Act because the comment "was merely the expression of the (company's) right as an employer to insist that employees devote working time to work."

The comment was made during an organizing drive of the Boot and Shoe Workers Union at Atlas Boot Manufacturing Company, Inc., Cookeville, Tenn. (DLR 160 (1956): A-7).

The Board rejected the trial examiner's finding that:

"Mrs. Ruth Newman testified that one week before the election, Dabbs (the supervisor) spoke to her at her machine after Dabbs had been summoned by the workers relative to an anti-union petition being circulated. In the course of the conversation with her, he stated his intention to fire Thompson and Nash if they did not quit passing out literature and talking union on company time. Dabbs admitted the tenor of the remarks as to the action without stating any names. He admitted in his testimony that he was referring to Thompson and Nash, as he had seen them distribute literature. In the absence of any well-established rule prohibiting solicitation, the threat of discharge action under it becomes a violation of Section 8(a)(1)." (*NLRB* v. *Atlas Boot Manufacturing Company*. No. 13,075. USCA 6 April 17, 1957.)

First large quantities of Mexican gas enter U. S.

THE TURNING of a valve on the Mexican side of the Rio Grande on August 22 sent the first large quantity of Mexican natural gas ever to enter the United States on its way to housewives in the Midwest and Northeast sections of the country.

At ceremonies near Reynosa, Mexico, Jose Colomo, assistant managing director in charge of production for Petroleos Mexicanos, and Olin Culberson, chairman of the Texas Railroad Commission, turned the giant valve that sent Mexican natural gas into Texas Eastern's 5900-mile gas pipeline network.

Dignitaries from both sides of the border, including representatives of the Mexican government and the United States State Department, attended the international ceremonies at Reynosa, Mexico, and McAllen, Texas.

Orville S. Carpenter, president of Texas Eastern, said, after the ceremonies: "We have just participated in a valve turning ceremony which marked an occasion of great significance to our respective countries as well as to Pemex and Texas Eastern. Its importance goes far beyond the mere establishment of a new pipeline link. It marks the end of an era and the beginning of a new period of mutually beneficial cooperation between the petroleum industries of the United States and our great neighbor to the South."

Initially Texas Eastern will take 126,000,000 cubic feet of gas per day from Mexico with provisions for this amount to be increased to 200,000,000 cubic feet per day as new reserves are developed. This is part of an expansion program which will add 360,000,000 cubic feet to Texas Eastern's daily delivery capacity by fall, bringing total system capacity to 1,634,000,000 cubic feet per day.

The gas being imported is coming from the Brasil, Trevino, and Lomitas fields located in northeastern Mexico. Processed at the Pemex natural gas processing plant at Reynosa, the gas is being delivered from the plant into Texas Eastern's system at the border on the Rio Grande.

To import the gas, Texas Eastern on Oct. 9, 1956, received authorization from the Federal Power Commission to construct a pipeline to the Mexican border. Known as the McAllen-Vidor line, the new pipeline is a 30-inch diameter facility extending from the company's Vidor compressor station near Beaumont, Texas, along the Texas Gulf Coast to the international border just below McAllen, Texas. The pipeline was constructed by Texas Eastern at a cost of approximately $44,000,000.

In addition to carrying gas imported from Mexico, the McAllen-Vidor line will also be used to transport natural gas gathered from numerous fields along the Texas Gulf Coast area.

Home economists see eight magazine-designed kitchens

AN EYE-CATCHING display of eight American Gas Association sponsored all-gas kitchens and four gas ranges made up twelve booths shown at the American Home Economics Association Convention in St. Louis, June 25-28.

Kitchens in the A. G. A. unified gas exhibit were designed by seven of the nation's leading consumer magazines. One manufacturer, Geneva Modern Kitchens, designed and displayed its own kitchen.

Magazines designing the kitchens and the cooperating manufacturer whose products were used were as follows: *Parents' Magazine,* American Kitchens; *New Homes Guide,* Brammer Manufacturing Company; *Forecast for Home Economists,* Caloric Appliance Corporation; *Family Circle,* Mutschler Brothers Company; *Better Homes & Gardens,* St. Charles Manufacturing Company; *Woman's Day,* Yorktowne Kitchens; *McCall's,* Youngstown Kitchen, Division of American Kitchens.

Gas range displays were by Cribben & Sexton Company, Florence Stove Company, Magic Chef, Inc., and Tappan Stove Company.

This all-gas kitchen was designed by "Better Homes and Gardens" magazine and St. Charles Manufacturing Co.

One of the kitchens viewed by the Home Economists was this Mutschler Country Circle designed by "Family Circle"

Industry news

A.G.A. hails court action as protection for Seal of Approval

A FEDERAL COURT decision penalizing a California manufacturer of water heaters for unauthorized use of the American Gas Association Seal of Approval has been hailed by A. G. A. as a clear-cut precedent which will mean continued protection for the gas industry's coveted Blue Star Seal of Approval granted to appliances which meet rigid standards of performance.

Judson J. Whitehead Jr., Oakland, Calif., was fined $5,000 and two firms he has headed —the Jud Whitehead Heater Company and the Hynes & Cox Electric Corporation—were fined $2,500 each by Federal Judge Oliver J. Carter in the U. S. District Court in San Francisco for violating a permanent injunction issued in 1953. Judge Carter warned that further violations will result in imprisonment.

Action was instituted against Mr. Whitehead in 1953 on grounds that he had used the A. G. A. Seal of Approval on gas appliances which had not been approved. This resulted in a permanent injunction being issued against Whitehead on Dec. 9, 1953. A. G. A. subsequently contended the injunction was not being observed and that Mr. Whitehead and his companies should be cited for contempt of court. Approximately three years of litigation ensued, culminating in the $10,000 in fines imposed by Judge Carter last June 28.

Citing the "evasive misleading nature" of Mr. Whitehead's testimony in the proceedings, Judge Carter also turned down the defendants' application for future use of the A. G. A. Seal of Approval. The court order said:

"Defendants have made an application for an order directing plaintiff forthwith to receive and process defendants' applications for inspection, testing and approvals and extensions of approvals. This application is denied because of defendants' repeated violations of the injunction, and because the conduct of plaintiff in this respect has not been such as to warrant relief from this court for defendants."

Judge Carter held the defendants in contempt of court because "they have represented and sold gas water heaters as either having the Seal of Approval, being entitled to the Seal of Approval, or meeting the specifications required for a Seal of Approval. They have also failed to fully supply the required information concerning the persons to whom non-complying heaters had been sold and delivered and other inventory information."

The decision included this warning against further violations: "If there are any further violations of the order and decree of this court by Whitehead or any of the corporations named, or their officers, the Court will use its power of imprisonment to further enforce its decree."

Committee to support gas air conditioning manufacturers

IMMEDIATE STEPS to support the gas air conditioning programs of all manufacturers in the field have been initiated by the American Gas Association's newly organized Air Conditioning Promotion Committee.

Chairman W. W. Selzer, Columbia Gas System Service Corp., New York, declared at the committee's first meeting that gas air conditioning presents an enormous potential for the industry and that "now is the time for immediate action on the part of the utilities in selling gas air conditioning."

The committee's broad program is based on coordinating the stepped-up efforts of industry research committees, equipment manufacturers, and the promotion organizations of utility companies.

As one of its immediate goals, the committee has decided to help one leading manufacturer promote the sale of an estimated 4,600 gas air conditioning units during the present year. Other manufacturers will be assisted in tapping the huge air conditioning potential in the industrial, commercial and residential markets.

C. S. Stackpole, managing director of A. G. A., told the committee members they constituted one of the most important groups to be formed in the industry in many years. "There has been a real awakening in the gas industry to the fact that something must be done quickly about promoting and selling gas air conditioning equipment. Gas utilities are going into air conditioning in real earnest," he said.

Organization of an idea exchange to help utilities set up aggressive sales and service organizations within their own companies has already been started as a result of the new committee's actions. Utility ads and promotional materials currently in use are being collected by the A. G. A. Promotion Bureau and will be serviced throughout the industry in a "how-to-do-it" campaign.

Attending Air Conditioning Promotion Committee's first meeting are (l. to r.): Seated—E. L. Henderson, United Gas; C. S. Stackpole, A. G. A.; R. K. Eskew, Servel; J. R. Delaney, Cincinnati Gas; W. W. Selzer, Columbia Gas; J. S. McElwain, East Ohio; R. J. Vandagriff (foreground), Laclede; D. J. Kerr, Southern Union. Standing—H. F. Carr, Baltimore Gas; Tony DeFino, Servel; Clarence Baker, Servel; J. W. West, A. G. A.; P. B. Krapfl, Servel; H. W. Doering, Springfield Gas Light; F. W. Williams, G. F. Mullins, C. R. Bowen, M. A. Combs, R. H. Murray, all of A. G. A.

Start pipeline project

H. C. PRICE COMPANY, Bartlesville pipeline constructor, has started construction work on one of the nation's largest current pipeline projects with contracts for the completion of over 340 miles of 30-inch diameter pipeline to be built for Texas Eastern Transmission Corporation. Four complete "big inch" pipeline construction spreads of H. C. Price Company are participating in the project. The pipeline to be built by Price is in six separate sections which will loop existing Texas Eastern facilities already being used in transporting natural gas from Kosciusko, Mississippi, northward through Alabama, Tennessee, Kentucky and Ohio to a point near Uniontown, Pennsylvania.

Robertshaw moves offices

EXECUTIVE OFFICES of Robertshaw-Fulton Controls Company at Greensburg, Pennsylvania, are now being moved to Richmond, Virginia.

CGA elects Darroch, Purdy, McPherson at 50th annual meeting

HERBERT C. DARROCH, president of Moffats Ltd., was elected president of The Canadian Gas Association at its 50th annual meeting, held June 24-27 at Jasper Park Lodge, Jasper, Alberta, Canada. Other newly elected officers of the association are the first vice-president, H. L. Purdy, who is executive vice-president of the British Columbia Electric Company, and the second vice-president, R. C. McPherson, who is general manager of the Canadian Western Natural Gas Company.

Gas industry speakers on the opening day of the convention were the outgoing CGA president, F. R. Palin, assistant general manager, secretary, and treasurer of the Union Gas Company of Canada, and A.G.A. President Clare H. Zachry, president of Southern Union Gas Company.

In his address to convention delegates, Mr. Palin stressed that the tremendous expansion of the natural gas industry in Canada in the immediate future will require an equally tremendous amount of capital. Several companies have been able to raise their required funds from investors because of the bright future of natural gas, he said. "We must strive to keep the industry in this enviable position," he added, stating that investor relations can be strengthened through the financing of all expansion on a sound basis through full and accurate disclosures to investors on company progress.

Mr. Palin called for an adequate investor relations program to be set up and properly administered by a responsible officer in each gas company, for increased attention to public education regarding natural gas and its benefits, and for proper training of industry sales personnel.

Mr. Zachry, in a talk entitled "Suddenly It's Tomorrow," lauded the Canadian gas industry for its accomplishments in recent years, saying that "this is a truly remarkable chapter in the history of the gas industry." He spoke of some of the means to success for both the U. S. and Canadian gas industry, including aggressive salesmanship, upgrading of gas appliances, product development and standardization, and cooperation among the various elements of the industry.

F. R. Palin (r.), outgoing president of the Canadian Gas Association, greets Herbert C. Darroch, incoming CGA president, upon the latter's election at the group's fiftieth annual convention

Mr. Zachry offered six fundamental principles for members of the industry: We must, he said, continue to provide the best possible service; conduct our business so as to deserve and retain public confidence; enter into those activities which are for the good of the community; recruit, train, and develop young people of ability and character as future industry leaders; demonstrate a strong faith in our industry and the worth of its product; and continue to establish clear objectives and carry them through with vision, enthusiasm, and imagination.

On the afternoon of the first day a symposium on "The Gas Expansion Story" included the following speakers: Transmission—N. E. Tanner, Trans-Canada Pipe Lines, and Frank M. McMahon, Westcoast Transmission Co.; Distribution—John McMahon, Inland Natural Gas Co., R. C. McPherson, D. Cass-Beggs, Saskatchewan Power Corp., W. F. Davey, Winnipeg and Central Gas Co., T. Weir, Union Gas Co., and K. Lucas, Quebec Natural Gas Corp.

On Tuesday the gas industry speaker was D. K. Yorath, president of Canadian Western Natural Gas Company and Northwestern Utilities, who spoke on "Aspects of Natural Gas Development." Mr. Yorath said he believed that "there is every likelihood that a third pipeline would be built within five years." Pointing out that the gas industry has a possible 1,275,000 natural gas customers across Canada, he warned that new markets can only be obtained if the utilities serving them maintain a safe and efficient plant, the highest standard of service, and constant regard for the convenience and comfort of its customers. Mr. Yorath forecast that the acceptance of natural gas in communities that will have it for the first time will be far greater than present predictions.

NEGA 14th annual safety conference in Boston, Sept. 10

THE 14TH annual safety conference of the New England Gas Association is being held at the Sheraton-Plaza Hotel, Boston, on Sept. 10. Morning speakers of the conference include Dennis Murphy of the Service Pipe Line Company, whose subject is "Play Safe—Communicate," and E. H. Eacker of the Boston Gas Company, whose subject is "What We Do."

Round-table discussions in the afternoon will cover safety problems that often arise in the following areas: appliance servicing, street distribution, gas production, safety progress, LP-Gas storage and handling, and automobile fleets.

Operation Home Improvement active in New Orleans

AN ABANDONED RESIDENCE and a dilapidated apartment building side by side on the world's widest street, Canal Street, were the object of the first Operation Home Improvement project in New Orleans. A six-committee OHI group was organized in New Orleans last year, and has to date planned home modernization displays in seven sections of the city.

The two Canal Street houses were completely modernized. The abandoned residence was originally a one-family home; its walls showed evidence of vandalism. Through the work of OHI, its rooms were converted into six attractive efficiency apartments. This house and the apartment building next door were painted, repaired, redecorated, and provided with off-street parking facilities. Total revenues from both houses—only $50 a month before renovation—rose to $850-$1000 a month afterwards.

The homes, served by New Orleans Public Service Inc., were equipped with modern appliances. Before the project, gas estimated annual revenue from these homes was $127. Post-renovation total estimated annual revenue is $710, a 459 per cent increase without added investment by the utility. This additional revenue was created by the owner's installation of 36 space heaters and floor furnaces, 10 gas ranges, and 10 gas water heaters.

Many segments of the community—particularly the residents in the area—benefited from this improvement and appliance dealers' sales were stimulated.

Plan to construct $330 million Canada-California pipeline

PLANS TO CONSTRUCT a $330-million pipeline system to transport natural gas from Canada directly to California have been announced jointly by the Pacific Gas and Electric Company, the Canadian Western Natural Gas Company Limited, and Northwestern Utilities Limited.

The international project would connect the continually expanding California market to important new resources of natural gas in the Province of Alberta, thus adding substantially to supplies from other sources required to meet the mounting fuel and energy needs of the state.

A substantial quantity of gas has been purchased for the project by a recently organized Canadian subsidiary of our company, Norman R. Sutherland, PG&E president and general manager, said, and negotiations for the purchase of additional gas are in progress.

The project will require authorizations of governmental agencies of Alberta and of Canada, of the Federal Power Commission and of the California Public Utilities Commission.

Initial deliveries of 400 million cubic feet a day are planned for 1960.

The Canadian gas would augment PG&E's present supply from California fields and from fields in Texas and New Mexico. The latter fields now provide about two-thirds of the company's daily gas resources, and additional quantities from these fields will be purchased in the future as available, Sutherland said.

The Pacific Lighting Corporation has been offered 50 per cent of the deliveries from Canada. Robert A. Hornby, president of Pacific Lighting, said:

"We have been discussing with officials of Pacific Gas and Electric since 1956 the possibility of a project from Canada and have expressed our intention to participate with them in the organization, construction, and operation of this project. For several weeks we have been discussing our participation, including the receipt of 50 per cent of the total deliveries from Canada."

Dennis K. Yorath, president of Canadian Western Natural Gas Company Limited, said, "This is the first time that such a project is being undertaken on a basis that fully protects in advance the needs of Alberta utilities and their customers."

The proposed pipeline will span a distance of approximately 1300 miles from the gas reserves in Alberta to the San Francisco Bay area.

Approximately 550,000 tons of large-diameter steel pipe will be required for the project.

The line will cross several mountain ranges, including the Canadian Rockies. It will traverse portions of British Columbia, Idaho, Washington, Oregon and Northern California, and terminate at an existing PG&E transmission network station at Antioch.

Assisting in the design, engineering and construction of the project will be the Bechtel Corporation, international constructors and engineers. The financing will be handled by Blyth & Co., Incorporated, a nationwide firm of investment bankers.

To finance the project, securities in substantial amounts will be offered the investing public in both Canada and the United States, and part of the capital will be supplied by PG&E and others in amounts yet to be determined.

PG&E served all its customer needs with gas obtained exclusively from California fields until 1950, when supplies were imported from fields in Texas and New Mexico for the first time. Deliveries have been increased annually until today these out-of-state fields provide approximately two-thirds of the company's supply.

Roper Roast-O-Grill wins acclaim at debut in Kansas City

THE ROPER Roast-O-Grill, which resembles an auxiliary range-top oven but has far greater versatility, won unanimous acclaim at its recent debut at Kansas City, Missouri. An audience of nearly 200 persons gathered at the Hotel President to witness this new feature being demonstrated by the home service staff of The Gas Service Company.

The new unit can be used for grilling, roasting, steaming, baking, and frying. It consists of six working components, which can be interchanged depending on the type of cooking, and stored inside the range when not in use. The components are: an aluminum dome, a baking and roasting pan, a grilling and steaming pan, a wire rack, a baking sheet, and a heat baffle for baking and roasting to diffuse heat and actuate the Tem-Trol detector. An aluminum cover conceals the Roast-O-Grill when it is not in use, providing extra range-top working space.

At debut of Roper Roast-O-Grill, E. Carl Sorby (l.), Roper vice-president, puts on sales floor skit showing the recommended way to sell the unit. Serving as his "prospects" are Anne Anderson, associate editor of "Better Homes & Gardens," and Frank N. Seitz of Southern Counties Gas

At the debut of this unit, officers and sales executives of gas companies, LP-Gas dealers, industry leaders, and magazine editors were present. The master of ceremonies was Ray T. Ratliff, advertising director of Gas Service.

Speakers on the program included J. H. Makemson, Roper executive vice-president; B. C. Adams Sr., board chairman of Gas Service; E. Carl Sorby, Roper vice-president; and C. S. Stackpole, A. G. A. managing director. Participating in the demonstration were Ellen Bridges, Vivian Black, Juanita Luthi, Margie King, and Gretchen Glick, all of The Gas Service Company.

Lowers industrial rates

DOMINION NATURAL Gas Company, Limited announces that the Fuel Board has approved a new and reduced rate for customers served by the company who use more than one million cubic feet of gas monthly for industrial processing. Under this rate, gas cannot be used for space heating. The rate will become effective in Simcoe, Ontario, October 1, because there is a surplus of gas there that cannot now be delivered to the balance of the system. It will become effective in all other areas served when the company begins to buy gas from the line to be built by the Ontario Natural Gas Storage and Pipeline Company from Dawn Township to Hamilton, or from Trans-Canada at St. Catharines.

Gasco Briquets bow to natural gas in Pacific Northwest

THOSE PILLOW-SHAPED Gasco Briquets, once familiar to thousands in the Northwest as the "magic-fire" heating fuel, have bowed to natural gas progress. Washington Natural Gas Company has ended their manufacture.

Halted forever were the huge presses which have turned out an estimated five billion quarter-pound briquets and have operated 24 hours a day, seven days a week since the plant opened in 1937.

Prior to the arrival of natural gas, and the subsequent closing down of the company's manufactured gas plant last December, a unique oil-gas process produced a residue of pure lamp black. This was pressed into solid lumps and sold for fuel.

Natural gas has eliminated the source of lamp black. Accumulated materials have kept the plant operating to date.

Far from supplies of more common materials for manufactured gas, gas men of the Northwest originated the oil-gas process which was known in the industry as the Pacific Coast oil-gas process. Briquets were produced only by the gas companies of Seattle and Portland.

In the early days, the briquets were sold door-to-door in Seattle. Later they were wholesaled to fuel dealers. During the war, briquets disappeared from the market as the shortage of gas-making materials required the Seattle Gas Company to use the briquets to manufacture gas by another process.

Briquet production came to the end of the line recently at Washington Natural's plant on Lake Union. Harold Turner, superintendent, and Charles M. Sturkey, president, stopped the huge presses which have turned out some five billion briquets in 20 years of continuous operation

Seattle Gas Company resumed marketing of briquets for home heating in 1946, but with the advent of automatic heating the briquets were channeled more and more to outlying points.

They were shipped by barge to a sizable market in British Columbia and some were flown, at $200 per ton, to remote outposts in Alaska. Some were burned in the hibachis of fuel-short Japan.

Arkansas Louisiana to buy Servel air conditioning

ARKANSAS LOUISIANA GAS CO. has purchased the All-Year Gas Air Conditioning Division of Servel, Inc., of Evansville, Indiana, subject to approval of Servel stockholders.

Included in the purchase agreement are the entire business, property and assets of the Servel Gas Air Conditioning Division and the buildings of Servel's Defense Division, aggregating 14 acres of land and several buildings with a total of 478,000 square feet of floor space.

The total sale price is $4 million. This includes the book value up to $1 million for the inventory of the All-Year Air Conditioning Division and $3 million for other property and assets.

Under an additional agreement Servel is retained as consultant in the air-conditioning field by Ark-La for a fee of $200,000 per year over a five-year period, payable on a monthly basis.

Servel stockholders vote on the transaction at a special meeting in Dover, Delaware, on Wednesday, September 11.

W. R. Stephens, Little Rock, Arkansas, chairman of Arkansas-Louisiana's board, and J. C. Hamilton, Shreveport, Louisiana, president, said that purchase of the Servel Gas Air Conditioning Division is in line with the the gas company's program for diversification and expansion of operations.

Arkansas-Louisiana will continue the manufacture and sale of the full line of Servel gas air conditioning equipment by a wholly-owned subsidiary of the gas company, operating the present facilities at Evansville. Servel will continue to operate the plant until Arkansas-Louisiana takes over.

The gas company recently announced that it will construct and operate a $12 to $15 million cement plant near Foreman, Ark., which is expected to be in operation by the last quarter of 1958.

Arkansas-Louisiana also is expanding its exploration division, having recently completed a prolific gas-condensate discovery well in Ouachita Parish, Louisiana, on a wholly-owned 6,000-acre lease block. Tests from this well indicated the presence of at least four producing zones in addition to the horizon from which it was completed.

Arkansas-Louisiana presently is an integrated gas utility, engaging in exploration, production, purchase, gathering, processing, transmission and distribution, in Arkansas, Louisiana and Texas. It now serves 253,000 customers in 161 communities and last year sold some 210 billion cubic feet of gas, with gross revenues of $54.5 million.

Rich named president

JOHN F. RICH, newly elected president of the New England Gas and Electric Association, has been named president, director, and member of the Executive Committee of New Bedford Gas and Edison Light Company, a subsidiary of the association. He succeeds Floyd D. Campbell who recently resigned. Mr. Rich is an alumnus of Dartmouth College and Harvard Law School, and became a trustee of the association in 1947. He is a director of the Algonquin Gas Transmission Company of Boston.

Karn re-elected

DAN E. KARN has been re-elected president of Consumers Power Company. All other officers were re-elected as follows: Robert P. Briggs, executive vice-president; James H. Campbell, senior vice-president; H. Stanley Richmond, vice-president; Donald E. Herringshaw, vice-president; Claude A. Mulligan, vice-president; Harry R. Wall, vice-president; A. H. Aymond Jr., vice-president and general counsel; John W. Kluberg, controller; Walter H. Boris, secretary; and Lewis J. Hamilton, treasurer.

PG & E wins 2 awards

EMPLOYEES OF two departments of the Pacific Gas and Electric Company have earned American Gas Association safety merit awards for working over a million manhours without experiencing a disabling injury. The gas meter repair department's 30 employees have worked for the past 24 years—8,776 days or 1,440,000 manhours—without a disabling injury. The safety record of the gas department of the East Bay division covers from June 8, 1956 to Feb. 24, 1957—or 725 employees working 1,036,750 manhours.

J. Theodore Wolfe congratulates Rheem men on production of millionth gas-fired water heater at Sparrows Point (Md.) plant. Present are (l. to r.): E. H. Perry, R. C. Anderson, H. T. Halvorsen, Mr. Wolfe, W. G. Watt, and V. J. Heinis

Celebrate millionth gas-fired water heater

A DOUBLE CHRISTENING, during three days of festivities, marked the production of the millionth gas-fired water heater by the Sparrows Point (Md.) plant of Rheem Manufacturing Company.

At the first of the two christenings, conducted as a private ceremony for plant personnel, Mrs. Harry T. Halvorsen, wife of the resident plant manager, dubbed the millionth gas-fired water heater "The Magnificent Millionth."

For the christening, Mrs. Halvorsen used a flask of water containing samples from the largest body of water near each of the region sales offices of the Rheem home products division: Puget Sound, Pacific Ocean, Gulf of Mexico, Lake Michigan, and the Chesapeake Bay.

The top, front panel and bottom of the water heater were finished to simulate gold plating. Control for the water heater was specially prepared by Grayson Controls, with a similar gold-plated effect. Chrome-plated parts ware used for the pilot light.

On the second day of the celebration an open house was held for 2,000 wives and children of Rheem employees at Sparrows Point and for business and civic leaders in the Baltimore area. Rheem brought families of employees to the plant by chartered buses. The following day the water heater was delivered in a Brinks armored truck to the Baltimore Gas and Electric Company. There it was placed on a specially designed display in the center of the appliance showroom for the public christening ceremony by Mayor Thomas D'Alesandro.

In addition to Mr. Halvorsen and other executives of the Sparrows Point plant, Rheem was represented by Vearl J. Heinis, vice-president and general manager of the Rheem home products division. J. Theodore Wolfe, president of the utility, was host for the ceremonies in the utility's showroom.

In commenting on the event, Mr. Heinis pointed out that the Sparrows Point production milestone applies to gas-fired water heaters only.

Wisconsin Utilities Association accounting section convenes

SOME 130 accounting men attended the annual convention of the accounting section, Wisconsin Utilities Association, held at Land O' Lakes, Wisconsin, June 23-25.

Speakers included S. Lloyd Nemeyer, president, Wisconsin Utilities Association, and president of the Milwaukee Gas Light Company, who delivered the keynote address at the general session, June 24, on "The You in Utility."

Other speakers included George P. Steinmetz, chairman, Public Service Commission of Wisconsin, who spoke on "Current Utility Regulatory Problems"; C. D. McDaniel, partner, Arthur Andersen & Company, "Criteria for the Measurement of Accomplishment"; and John Perkins, vice-president, Continental Illinois National Bank and Trust Company of Chicago, on "Interest Rates and Inflation."

Gerhardt A. Schmidt, assistant secretary, Wisconsin Michigan Power Company, was named chairman of the section, succeeding Juel C. Berg, assistant controller, Lake Superior District Power Company. C. C. Herrmann, vice-president and treasurer, Wisconsin Power and Light Company, was named vice-chairman.

The last day of the convention was devoted to round-table sessions by the Section's committees on customers' accounting, general accounting, property accounting, and machine accounting.

Dean Mitchell favors continuing gas industry TV advertising

DEAN H. MITCHELL, president, Northern Indiana Public Service Company, who will become chairman of the A. G. A. Television Committee in October, is of the firm opinion that the gas industry's venture into television advertising must continue.

"In our television program ('Playhouse 90') we have much of which gas people everywhere can be proud," the former president of the American Gas Association said. "In my mind there is no question but what this magnificent venture must continue and be permitted to yield its full return."

Quoting L. Standord Reis, president of Reis and Chandler, security analysts, Mr. Mitchell re-emphasized the remarks made by the financial leader a year ago. Mr. Reis saw in the gas industry's entrance into television on a national basis an expression of confidence in the industry's own future—a signal to investors that the gas people were on the march. He said it was a first important step in overcoming a reservation investors have about buying gas stocks. The trouble was that the gas industry was being out-advertised by its competitors, thus allowing competition to build up long-range attitudes in the consumer's mind that would tend to limit, if not actually jeopardize, our investments.

Mr. Mitchell said he believed that if the television activity served no other purpose it would be worth its price if, in the financial community, it can create the feeling that the gas industry is going places, is actively competitive in every facet of its operations, including its advertising.

Highlights of cases before the Federal Power Commission

Bureau of Statistics, American Gas Association

Rate cases

● **Algonquin Gas Transmission Company's** proposed $2.0 million annual wholesale natural gas rate increase was suspended by the FPC. The increase would have affected 24 utility customers in New York, New Jersey, Connecticut, Rhode Island and Massachusetts. The increase is suspended until November 10, when it may be put into effect, subject to refunds, if the proceedings have not been concluded.

● **Gulf Interstate Gas Company's** proposed $1.9 million (or 8.7 per cent) annual natural gas rate increase has been suspended by the FPC. The proposed increase affects transportation charges to Gulf Interstate's sole customer, United Fuel Gas Company. The proposed increase is based on a 6¾ per cent return. The FPC said that the proposed increase by Gulf Interstate on its rate of return from 6 per cent to 6¾ per cent per year, which together with related income taxes would result in the $1.9 million annual increase, "has not been shown to be justified, and may be unjust, unreasonable, unduly discriminatory, or preferential, or otherwise unlawful."

• **United Gas Pipeline Company's** proposed $5.4 million annual wholesale gas rate increase was suspended by the FPC. The increase would have affected 50 wholesale customers in Alabama, Florida, Louisiana, Mississippi and Texas. United Gas based the proposed new increase principally on the future cost of purchased gas and the cost of obtaining capital funds.

Certificate cases

• **Cities Service Gas Company** has been authorized by the FPC to construct and operate approximately 60 miles of natural gas pipeline in the Eureka area of Grant and Alfalfa Counties, Oklahoma. Cost of the project is estimated at $1.3 million.

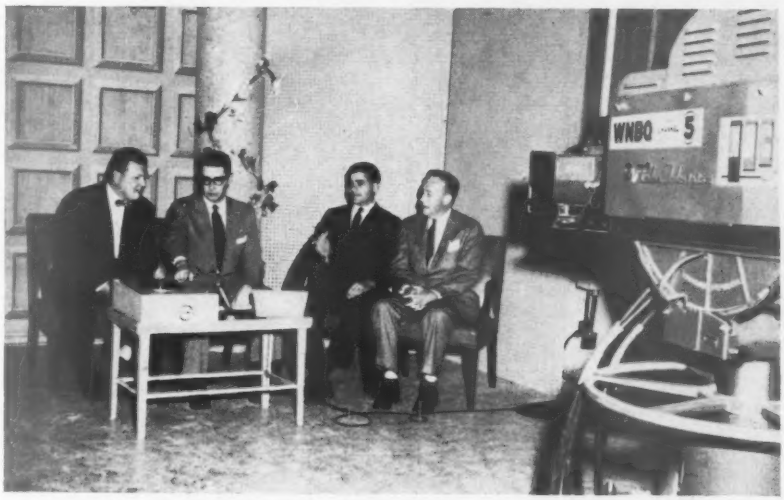
• **East Tennessee Natural Gas Company** has received FPC authorization to construct and operate a 3,300 horsepower compressor station at a point of connection between its system and that of its supplier, Tennessee Gas Transmission near Greenbrier, Tennessee. Cost of the project is estimated at $1.0 million. The new station will enable East Tennessee to increase the pressure of its 22 inch Greenbrier-Oak Ridge pipeline system during non-peak periods, building up line pack for use on peak days. The company said that this would enable it to avoid an increase in its cost of purchased gas resulting from a lowering of its system load factor. Annual net savings are estimated at $27,265 in 1958, $23,659 in 1959, and $63,147 in 1960.

• **Michigan Gas Storage Company** received temporary authorization from the FPC to add 3,800 in compressor horsepower to its Muskegon River station and to improve its Winterfield and Cranberry Lake Storage Fields by drilling wells, constructing about 6 miles of gathering pipelines and various well lines. The proposed facilities will enable Michigan Storage to meet the requirements of its sole customer, Consumers Power Company. Cost of the project is $1.0 million.

• **Montana-Dakota Utilities Company** was authorized by the FPC to construct a 1,980 horsepower compressor station at Dickinson, North Dakota; 6 miles of pipeline between Masdan and Bismarck, North Dakota; and about one mile of lateral line to Sidney, Montana to provide emergency gas service to Montana-Dakota's 44,000 kilowatt steam electric generating plant. Cost of the project is about $1.1 million.

• **Ohio Fuel Gas Company** will construct 38 miles of 24 inch line paralleling an existing line from the company's Crawford compressor station in Fairfield County to its Treat station in Licking County. According to the FPC authorization, Ohio Fuel will also build approximately 17 miles of 20-inch line which will extend an existing line from its terminus in Jackson County to the Symmes compressor station in Lawrence County. Ohio Fuel will also install an additional 3,000 horsepower in compressor capacity at its Crawford station. Total cost of the project is estimated to be $4.7 million. The project will enable Ohio Fuel to transport an additional 113 million cubic feet daily.

WNBQ stages salute to gas industry



During the Midwestern Gas Sales Conference, a salute to the gas industry was staged by Polk Brothers and Station WNBQ. TV viewers had an opportunity to see automatic top burner heat control as explained by (l. to r.): Harry Walker, Caloric sales promotion manager; the WNBQ station announcer; Roy Klein, Caloric sales vice-president; and C. S. Stackpole, A. G. A. managing director

• **Pacific Northwest Pipeline Company** was granted temporary authority by the FPC to construct 35 miles of 6 and 4 inch lateral pipeline from its 26 inch line in Snohomish County, Washington. Pacific Northwest will also construct 41 miles of 6⅝ inch line to the Bunker Hill Company at Kellogg, Shoshone County, Idaho. The FPC authorization also permits Pacific Northwest to construct 37 miles of 8⅝ inch lateral line from its 20 inch Spokane lateral to the plant of Utah-Idaho Sugar Company, near Moses Lake, Washington. The project, to cost $3.5 million, will enable Pacific Northwest to sell almost 19 million cubic feet daily to three industrial customers.

• **Southern Natural Gas Company** received FPC authorization to construct 60 miles of pipeline, 7,260 horsepower in compressor capacity, and meter and regulating stations in southern Louisiana. The proposed construction will enable Southern Natural to connect its transmission system to additional natural gas reserves in 10 fields located in, and the offshore areas adjoining Jefferson, Plaquemines and St. Bernard Parishes in Louisiana.

• **Texas Eastern Transmission Corporation and Texas-Eastern Penn-Jersey Transmission Corporation** received temporary authorization from the FPC to construct natural gas facilities estimated to cost $30 million. Texas Eastern proposes to construct 97 miles of 30 inch loop line between Kosciusko, Mississippi and Uniontown, Pennsylvania; about 9 miles of supply laterals; a new 10,250 horsepower compressor station and the addition of 33,360 compressor horsepower to existing stations. Penn-Jersey proposes to add 24,000 compressor horsepower to existing stations on its pipeline system extending from Westmoreland County, Pennsylvania, to Texas Eastern's compressor station No. 26, near Lambertville, New Jersey. These facilities would be leased to and operated by Texas Eastern. The facilities proposed would raise Penn-Jersey's capacity to 505 million cubic feet per day. Texas Eastern's facilities would enable it to sell for resale an additional 112 million cubic feet per day of long-term gas and approximately 84 million cubic feet per day of winter peaking gas for the winter of 1957-58.

• In another certificate case, **Texas Eastern and Wilcox Trend Gathering System Inc.** are seeking FPC authorization to construct natural gas facilities for the purpose of enabling the applicants to purchase natural gas from independent producers along the present transmission pipelines. Cost of the joint venture is approximately $4.0 million.

• **United Fuel Gas Company** has received temporary authorization from the FPC to develop a natural gas storage field in Kanawha County, West Virginia. The development of the new pool, having an estimated maximum capacity of 14.8 billion cubic feet, will provide an estimated peak day capacity of 110 million cubic feet. Cost of the project is $1.6 million.

A.G.A. announces new publications issued during July-August

COMMERCIAL PROMOTION

• **Equipment Proposal Folder** (for commercial gas sales managers). Sponsored by A. G. A. and available from the A. G. A. Commercial Promotion Bureau at $15 a hundred copies.

• **What Is Factual—What Is Fictional** (for commercial gas sales managers). Sponsored by A. G. A. and available from the A. G. A. Commercial Promotion Bureau at $8.50 a hundred copies.

PAR

• **PAR Briefs** (for gas company executives). Sponsored by PAR Committee and available free of charge from A. G. A. Headquarters.

STATISTICAL

• **Monthly Bulletin of Utility Gas Sales, June 1957** (for gas companies, financial houses). Sponsored by and available free of charge from the Bureau of Statistics.

• **Quarterly Report of Gas Industry Operations, Second Quarter 1957** (for gas companies and financial houses). Sponsored by and available free of charge from the Bureau of Statistics.

• **1957 Gas Facts, 1956 Data** (for gas companies, financial houses, marketing researchers, appliance manufacturers). Sponsored by and available from the Bureau of Statistics; $2.50 a copy.

• **1957 Gas Data Book, 1956 Data** (for gas companies, financial houses, marketing researchers, appliance manufacturers). Sponsored by and available from the Bureau of Statistics; 50 cents for one copy, and 25 cents for each additional copy.

• **Gas Requirements and Supplies of the Gas Utility and Pipeline Industry, Annual 1956-1960, Peak Day 1956-1957 to 1960-1961** (for gas companies, financial houses, marketing researchers, steel companies). Sponsored by and available from the Bureau of Statistics; $2 a copy.

C of C issues study of Roper employee communications program

A CASE STUDY of the Geo. D. Roper Company's employee and community relations program has been published by the U. S. Chamber of Commerce.

This is the fourth such study made by the Chamber of Commerce in recent years. Earlier case histories examined practices in employee and community relations at Standard Register Company, Steel Improvement and Forge Company, and the Ansul Chemical Company.

In an introduction to the study, Stanley H. Hobson, Roper president, tells how his company of 1,200 employees experienced a normal growth over the years until one day company officials discovered they no longer knew their employees by first names. No longer was there a free-and-easy mingling between employees and management.

Roper employees were organized in 1946, Mr. Hobson reports, and he subsequently learned how it felt to have his employees go out on strike. In the wake of these conditions, Roper turned to the supervisors for help in building an effective employee communications program.

The case study dissects Roper's oral and written communications with employees and the public. It explains the four main defects Roper found in its supervisory program; the nine areas in which Roper supervisors said they wanted to know more about the company; and concludes with a 16-point check list any employer can use to analyze his own employee communications program.

Effective Employee and Community Relations: A Report on the Geo. D. Roper Company, 24 illustrated pages in two colors, is available from the business relations department, Chamber of Commerce of the United States, 1615 H St., N. W., Washington 6, D. C., for 50 cents a copy.

Paper describes storage of pipe

HOW GAS INDUSTRY companies store pipe, both coated and bare, is described and illustrated in a paper just released by the American Gas Association Purchasing and Stores Committee.

Four speakers participated in a panel discussion led by H. E. Wade, The Peoples Gas Light and Coke Co., during the 1957 General Management Section Conference. Their remarks and reproductions of the slides used have been brought together in a paper that should be of value and interest to anyone concerned with pipe storage problems.

Two of the panelists represented transmission companies, while the other two spoke for distribution companies. They were A. H. Cannon, Transcontinental Gas Pipe Line Corp.; V. C. Parkes, El Paso Natural Gas Co.; C. O. Ellis, Michigan Consolidated Gas Co.; and R. I. Highgate, Memphis Light, Gas and Water Division.

In addition, pictures of pipe storage operations were submitted by W. N. McClelland, Consumers Power Co.; R. L. Groves, Oklahoma Natural Gas Co.; and the discussion leader, Mr. Wade.

The paper is illustrated with 46 black-and-white reproductions of the original color slides. In order to help defray these costs, a charge of $1.00 is being made for each copy. Orders for "Pipe Storage Methods" may be addressed to Secretary, General Management Section, American Gas Association, 420 Lexington Ave., New York 17.

IGU group meets

THE International Gas Union committee dealing with the study of the harmonization of essential clauses in the specifications for stamping of gas appliances for domestic use recently held a two-day meeting in London. At the meeting, plans were made to work out a comparative table of national specifications for appliances using propane and butane gas, and for the installation of these appliances. Also discussed were the national standards for washing machines, gas refrigerators, and rubber connecting tubing of appliances, for the purpose of setting up recommendations for international specifications. A third matter under discussion was the report submitted by this committee at the New York conference of 1955, and possible revisions in it.

Three-day gas firing workshop held

A THREE-DAY gas firing workshop, attended by over 75 men from utilities, architects, engineers, and contractors, was recently co-sponsored by the Consolidated Edison Company and Orr & Sembower, manufacturers of packaged automatic boiler equipment. The seminar, which spotlighted the problems associated with the use of large gas-fired equipment, was held at Consolidated Edison's service training center in Flushing, New York.

Five Orr & Sembower spokesmen spoke to the seminar group: Vincent N. DeCerchio, assistant to the president, took visitors on a picture tour of the company plant; Edgar A. Burt, chief engineer, explained the technical aspects of gas combustion; William B. Firman, Powermaster sales manager, pointed out the increasing use of gas-fired boilers during the past few years, and reported that sales of boilers built to burn gas now account for more than half of all Orr & Sembower packaged boiler sales; Paul O'Hara, New York sales manager, discussed features of the packaged automatic boiler, and Theodore Schladitz, service manager, outlined tips on boiler installation, operation, and maintenance.

New Proceedings plan

FOR THE first time, the A. G. A. Operating Section will publish its own *Proceedings* as a separate publication apart from the regular A. G. A. *Proceedings* which is published annually. All available reprints of the formal technical papers presented at the 1957 spring conferences and at the forthcoming national convention in St. Louis will be included. The Operating Section Proceedings—in the form of a three-ring binder—will be bound in green cloth as a companion volume to the A. G. A. Proceedings. It will be available from the A. G. A. Headquarters Order Department at $10 a copy.

Lester T. Potter succeeds D. A. Hulcy as Lone Star Gas president

L. T. POTTER, a Lone Star Gas Company employee for 30 years, has been elected president succeeding D. A. Hulcy. Mr. Hulcy served as president for over 17 years. At the request of the board of directors, he will continue with the company as chairman of the board "even beyond his normal retirement date of Dec. 1, 1957." He has been board chairman since 1952.

Mr. Potter joined Lone Star immediately upon graduation from Texas A & M College. His first work was that of syphon inspector in the gas measurement department. In 1931 he was named assistant production engineer, in 1938, superintendent of the production-engineering department, and in 1941, superintendent of the combined operations of the production and production engineering departments.

Mr. Potter was appointed assistant to the general superintendent of the transmission division in 1945, and assistant to the president in 1947. Seven years later he was elected executive vice-president, the post he held until he was elected president July 10.

Active in the American Gas Association, Mr. Potter is chairman of the Economics Committee and a member of the Laboratories Managing Committee.

Mr. Hulcy began his career with Lone Star in 1920 as a clerk in the accounting department, and four years later became chief clerk of his section of that department. In 1929 he became assistant to the president of Lone Star, and in 1935 was elected a member of the board and made a vice-president. He was elected executive vice-president in 1936, and president in 1940.

Under Mr. Hulcy's leadership, Lone Star experienced its greatest growth. Lone Star assets and capitalization quadrupled during this period.

L. T. Potter

D. A. Hulcy

During his entire Lone Star career, Mr. Hulcy has been active in business, social, civic, and welfare organizations. At one stage of his career, Mr. Hulcy served simultaneously as president of A. G. A. and president of the U. S. Chamber of Commerce, while carrying out his duties as president of Lone Star.

Personal and otherwise

Hall joins Heatbath

CLIFFORD E. HALL has joined Heatbath Manufacturing Company, Springfield, Massachusetts, as vice-president in charge of sales. Previously he was utility sales manager of the Coleman Company. Mr. Hall's background includes nine years with the American Gas Association, starting in 1946. He served first as assistant director of the Promotion Bureau then as promotion manager with charge of carrying out an enlarged post-war promotional program. He has also worked with Bowser, Inc., as general sales manager, and with the Connecticut Light and Power Company as assistant director of public relations.

Boyer retires

E. J. BOYER, vice-president, sales, retired from the Minneapolis (Minn.) Gas Company on July 27. Mr. Boyer had a career spanning 35 years in the utility field, all but six at the Minneapolis Gas Company. In 1928 he joined the Minneapolis utility as sales manager. He was appointed assistant vice-president in 1955, and in 1956 was promoted to vice-president. Mr. Boyer, through the years, has served on several important gas industry committes, and as president of the Mid-West Gas Association, general chairman of the Mid-West Regional Gas Sales Conference, chairman of the Residential Gas section of the American Gas Association.

Dallas newspaper lauds Zachry as nation's leading gas salesman

THE NATION'S NUMBER ONE salesman for natural gas hangs his hat in Dallas—when he finds time to hang it at all.

That was the opening lead of a tribute paid to Clare H. Zachry, president of the American Gas Association and president of Southern Union Gas Company, in a recent issue of the *Dallas Times-Herald*. The story praising Mr. Zachry was one of a series of newspaper articles on Dallas residents who have attained success in their chosen field.

"With his briefcase bulging with speeches and assorted data on the virtues of using natural gas, Clare H. Zachry has been criss-crossing the nation several times in the past year to talk about natural gas and to conduct affairs of the company he heads," the newspaper stated.

Mr. Zachry was quoted as saying, "I would love to be one of those golfing executives you always read about, but I just don't have the time." He plays golf occasionally, but prefers to spend most of his spare time in church work or with his family.

The article outlines his career from his birth in 1895 through his early years when he left school at 16 to start a career of self education which has led to acknowledged leadership in the gas industry. One of his first jobs paid him $20 a month.

The story continues: "In the years since he was made president of Southern Union, he has witnessed and played a large part in the phenomenal growth of natural gas. . . .

"The growth in use of natural gas and its effect on the nation's economy is dramatic," he told the newspaper. At present, the story went on, Mr. Zachry, A. G. A. and the nation's gas companies are championing varied uses for natural gas during the summer, such as power for home air conditioning and irrigation pumps.

Consolidated Edison elects Forbes board chairman, Eble president

HARLAND C. FORBES, president of the Consolidated Edison Company of New York since 1955, has been elected chairman of the board. Charles E. Eble, vice-president in charge of accounting, auditing, and tax operations since 1953, has been elected president.

Consolidated Edison also announces that James F. Fairman, Earl L. Griffith, and L. A. Scofield, all vice-presidents, have been named senior vice-presidents. All five men are members of the American Gas Association.

Mr. Forbes joined the utility in 1924 as assistant to the chief electrical engineer. As system engineer and as assistant vice-president in charge of system planning, he was primarily responsible for the plan upon which the company's postwar expansion was based. He was elected executive vice-president in 1949 and became president in 1955. He is chairman of the company's financial advisory committee.

Mr. Eble began his career with the company as an office boy in 1916. He studied accounting and business administration in night school, and progressed through positions of increasing responsibility. He was appointed assistant controller of Consolidated Gas in 1935, and senior Assistant Controller of Consolidated Edison in 1936. He became controller in 1946, and was elected vice-president in 1953. Mr. Eble has been active in the A. G. A. Accounting Section for over two decades.

H. C. Forbes

C. E. Eble

Foster named director of Southern California Gas

Frank M. Foster

FRANK M. FOSTER, vice-president of Southern California Gas Company, has been elected a member of the board of directors of the utility.

Foster, who has been vice-president at the gas company since January, 1955, was named to the post this week at the regular monthly meeting of the board of directors. As vice-president he will continue to be responsible for sales, advertising and public relations functions of the company.

He first joined the utility in 1936, and held various management positions for the company both here in metropolitan Los Angeles and suburban operating divisions. He was named general sales manager in 1949.

In 1947 and again in 1952, Foster served as committee chairman for the American Gas Association, and has been active in several A. G. A. and Pacific Gas Association functions.

Elect Bailey, Seitz

ALAN R. BAILEY, senior vice-president, and Frank N. Seitz, vice-president, both of Southern Counties Gas Company, have been elected to the board of directors of that utility. Before joining Southern Counties last year, Mr. Bailey was assistant to the president of Pacific Gas and Electric Company, and vice-president in charge of operations of Coast Counties Gas and Electric Company until the latter was merged with PG&E. Mr. Seitz joined Southern Counties in 1950 and has headed its sales activities since that time. The utility also named C. E. Brown to handle market research and development.

Maurice Walsh, Natural Gas Association founder, dies at age of 87

MAURICE W. WALSH, who was retired after a long career in the gas industry, died June 28 at the age of 87.

Mr. Walsh was the man who suggested forming a natural gas association a half-century ago. A meeting of gas men was called at the Midland Hotel in Kansas City on Feb. 20, 1906, to bring it about. There was consternation when 13 men turned up for the meeting, and a traveling salesman seated in the hotel lobby—confused but agreeable—was willing to join the group to break the "13 jinx." Plans were laid for the second meeting, which was attended by the 25 men who became charter members of the Natural Gas Association of America. This association expanded greatly in the following two decades, and in 1927, consolidated with the American Gas Association. Mr. Walsh was a member of A. G. A. from 1927 until 1956.

Mr. Walsh was born in Holly, Michigan. His first gas industry job was as plumber's helper for the Detroit City Gas Company in 1888. Prior to his retirement in 1940, he was superintendent of distribution and construction for the Louisville (Ky.) Gas & Electric Company.

Names in the news—a roundup of promotions and appointments

UTILITIES

Frederick C. Koch, prominent Wichita oil man, has been elected a member of the board of Northern Natural Gas Company.

Edwin K. Daly Sr., president of Horn & Hardart, was elected a director of Philadelphia Electric Company, succeeding **Samuel Lloyd Irving** who has retired from the board.

New assistant secretary of Cities Service Gas Company is **Kenneth E. Manner,** who recently joined the company as assistant to the secretary.

Edwin J. Ferguson has been promoted to manager of Equitable Gas Company's newly formed commercial department. He was formerly assistant general superintendent of distribution. Succeeding him is **William C. Washburn Jr.,** formerly credit manager.

B. W. Croft of Mountain Fuel Supply Company has been promoted from assistant manager to manager of the company's producing division at Rock Springs, Wyoming. He succeeds the late **D. K. Bowen.**

It has been announced that **Gordon O. Jerauld,** formerly southern division general superintendent of Washington Natural Gas Company, has accepted a position in the gas department of Stone and Webster Service Corporation. Stone & Webster Engineering Corporation reports that **Robert J. Carter,** district manager, has been named a special assistant to the managing director of the Stone & Webster subsidiary in London.

Brooklyn Union Gas Company reports that **James Wyrtzen,** who joined the utility in 1930, has been promoted to assistant commercial sales manager of its new business department, and **James W. Dunlop** has been named senior research assistant in its rate department.

A. G. Ford has retired from Northern Illinois Gas Company after over 35 years of service. He was assistant manager of operations previous to his retirement.

Peoples Gas System of Florida announced these recent promotions: **Ivan E. Ball,** from vice-president—comptroller to financial vice-president—system; **George V. Justin,** from director of operational planning to vice-president—operations—system; **Charles W. Davis** from superintendent of the Fulford manufacturing plant to director of operations, Peoples Water and Gas Division; and **Herbert T. Young,** from assistant superintendent to superintendent of the Fulford plant.

MANUFACTURERS

E. A. Nash, formerly general sales manager at Servel, has been appointed director of gas appliance sales of Norge Division, Borg-Warner Corporation.

Rockwell Manufacturing Company reports that **Munro Corbin,** controller since 1951, has been elected vice-president and assistant to the president. His duties will include coordination of all staff and management committee functions at the company's headquarters, as well as long-range planning and special assignments. Succeeding him as controller is **John T. Farrell,** assistant controller since 1953. **Paul A. Manor,** chief engineer at Rockwell's Barberton (Ohio) valve division, has been promoted to chief engineer, central valve research and development department at Pittsburgh.

George W. Stevenson, American Meter Company's manager of West Coast operations, has been appointed as vice-president of the company and will continue in charge of sales and manufacturing activities in Washington, Oregon, California, Arizona, Nevada, Idaho, and Hawaii.

William M. Wilkinson has been named president and **Seth T. Roberson** vice-president of Natural Gas Odorizing, Inc., manufacturers of natural gas and LP-Gas odorants. Mr. Wilkinson was formerly an associate with a private investment firm. Mr. Roberson has been with Natural Gas Odorizing for over nine years, with positions in manufacturing, sales, and research.

New assistant national service director of Robertshaw-Fulton Controls Company is **Charles A. Smith,** formerly manager of the product service division of A. O. Smith Corporation. Mr. Smith's work will deal primarily with the establishment of an expanded training program for utility, distributor, and retailer servicemen.

Worthington Corporation has announced the election of **William A. Meiter** to the newly created post of vice-president—employee relations and organization development. Mr. Meiter, formerly general marketing manager, has been associated with the company since 1927.

Milford H. Luttrell, who joined the Walworth Company in 1933, has been named general sales manager of the company. He was formerly assistant manager, then manager, of the Southeastern division.

PIPELINES

Texas Gas Transmission Corporation has made four recent appointments. **E. F. Hindman,** with a background of 28 years in the natural gas business, has become superintendent of the pipeline department. **W. O. Davis** succeeds Mr. Hindman as manager of the company's Louisiana division, and **Edward Hamric** becomes assistant superintendent of the pipeline department. Mr. Davis and Mr. Hamric have been assistants to the pipeline superintendent. New superintendent of the compressor department's Kentucky and Indiana division is **C. E. Coffey,** who has been manager of the compressor station at Jeffersontown since its construction was started in 1949.

Manufacturers elects Coleman general manager

J. E. Coleman

J. E. COLEMAN has been elected vice-president and general manager of Manufacturers Light and Heat Company. He will also serve in the same executive capacity with Cumberland and Allegheny Gas Company and Home Gas Company, two other companies which operate with Manufacturers as the Pittsburgh Group companies of Columbia Gas System.

Mr. Coleman, a graduate of Cornell University, began his career as an industrial engineer with Northern Indiana Public Service Company in 1925 and joined Manufacturers in 1937. He became assistant sales manager in 1945 after three years' army service, was named purchasing agent in 1948, and assistant vice-president in 1952.

He was elected vice-president in charge of gas estimates and industrial and wholesale gas sales in 1953, and assumed the further responsibility for executive direction of Manufacturers' engineering and legal departments last November.

He is a member of the American Gas Association.

Gaw vice-president

J. WILSON GAW, director of public relations for Washington Natural Gas Company, has been elected vice-president for public relations at an organizational meeting of the company's board of directors. All other officers of the company were re-elected. Mr. Gaw began his business career as a salesman for Seattle Gas Company, the predecessor company, in 1931. Before becoming director of public relations, after the merger of Seattle Gas and Washington Gas and Electric companies into Washington Natural Gas Company, Mr. Gaw had been general sales manager and assistant to the president. He is chairman of the Pacific Coast Gas Association Public Relations Committee.

Texas Gas Transmission elects Rader and Stowers vice-presidents

F. K. RADER has been elected vice-president, and H. L. Stowers vice-president and chief engineer of Texas Gas Transmission Corporation. Mr. Rader formerly served as assistant to the executive vice-president and Mr. Stowers has been chief engineer for Texas Gas and a predecessor company for the past 14 years.

Mr. Rader was employed by Texas Gas on Jan. 1, 1952, and in his former position has been responsible for all applications and Federal Power Commission activities except rates. Prior to joining Texas Gas he was employed by Shell Oil Company. He has for many years been active in the negotiation of natural gas contracts both for Texas Gas and in positions with previous employers.

Mr. Stowers was appointed chief engineer for Memphis Natural Gas Company in 1943 and continued in that position with Texas Gas following its merger with Memphis Natural. Before his employment by Texas Gas he was with the Southwestern Light and Power Company of Oklahoma.

McCarter resigns

THOMAS N. McCARTER, since 1943 a director of Public Service Electric and Gas Company of New Jersey, resigned from the board recently because of ill health. Mr. McCarter has been a vice-president of the company since 1939. He is the son of the late Thomas N. McCarter, who was the first president of Public Service and the donor of the McCarter Medal for life saving which is awarded by the American Gas Association. Following Mr. McCarter's resignation, Francis A. Keane was elected a member of the board and a vice-president. Mr. Keane, who has been assistant to the president of Public Service, started with the utility in 1923 and has held various positions in the statistical and comptroller's departments of the company. He is an engineer and holds a master's degree in business administration. Both Mr. McCarter and Mr. Keane are members of A. G. A.

True honored

DEAN W. TRUE, chief engineer of the Milwaukee Gas Light Company, was honored recently by Tufts University on the occasion of the Massachusetts school's 101st annual commencement. Mr. True, who had attended Tufts, received the honorary B.S. degree of bachelor of science in Boston June 9. In granting the degree, the president of the university said: "Your success as a practicing engineer more than qualifies you for the degree which you were unable to earn as an undergraduate. With pride we mend that omission." True has spent 30 years with the Milwaukee Gas Light Company, having started as a surveyor in 1927. He became distribution engineer of high pressure systems in 1930, production engineer in 1940, design engineer in 1949 and was made chief engineer in 1950. He is currently vice-chairman of the A.G.A. Distribution Committee.

Three vice-presidents

THREE EXECUTIVES of the Arkansas Louisiana Gas Company, Shreveport, Louisiana, were elevated to newly created vice-president posts. They are E. N. Henderson, B. E. Harrell, and D. W. Weir. Mr. Henderson, vice-president and chief engineer, has been chief engineer since 1954. Previously he was acting chief engineer; acting assistant superintendent of the products extraction department; and engineer. Mr. Harrell, vice-president and manager of gas supply and sales, served for five years as superintendent of gas supply before becoming manager of gas supply and sales last year. Mr. Weir, vice-president, was appointed assistant to the president last year, after holding the position of personnel manager for three years. He has also done statistical, tax, budget, and insurance work for the company. All three men are members of A. G. A.

OBITUARY

W. F. Roberts

a leader in a multitude of industrial and civic groups, died July 13 at the age of 78.

Mr. Roberts was at various periods vice-president of Bethlehem Steel, president and chairman of the board of the Standard Gas Equipment Company, and a top member of civic, welfare, governmental, and cultural groups in the city of Baltimore and the state of Maryland.

Mr. Roberts served as a director of the American Gas Association from 1930 to 1932.

Survivors included three daughters, three brothers, and eight grandchildren.

Francis E. Drake

widely known as a designer of propane gas plants for utilities and general industrial use, and a partner in Drake and Townsend, gas plant engineers of New York City, died August 5 at his home in Pelham, N. Y.

Mr. Drake received a degree in mechanical engineering from Massachusetts Institute of Technology and started his career as a draftsman. He became manager of the gas department, supervisor and subsequently vice-president of the Utility Management Corporation. He also was vice-president and chief engineer of the Pacific Gas Corporation.

Later he was a vice-president of the E. M. Gilbert Engineering Corporation. He helped organize the Drake-Townsend organization in 1951 and had served as its vice-president and treasurer. He also was a former vice-president of the Lynn Gas and Electric Corporation in Massachusetts.

A past director of the New England Gas Association, Mr. Drake was also a former secretary of the New England Guild of Gas Manufacturers. He was a former chairman of the Water Gas Committee of the American Gas Association, and was a known authority on gas generation and distribution.

At the time of his death he was chairman of the A. G. A. Builders' Subcommittee and a member of the Manufactured Gas Production Committee and the LP-Gas Utility Code Committee.

Frank W. Marx

64 years old, died recently following a heart attack. Mr. Marx had been in the employ of the Michigan Consolidated Gas Company for the past 38 years. At the time of his death he was superintendent of the utility's station A production plant.

Mr. Marx was a graduate of Michigan State University and a member of the American Gas Association. He is survived by his wife Josephine, a son, and a daughter.

New A.G.A. members

Gas Companies

Eastern Oregon Natural Gas Co., Ontario, Ore. (E. W. Jorgensen, Pres.)

Pacific Natural Gas Co., Longview, Wash. (Edward Niederer Jr., Exec. Vice-Pres. & Gen. Mgr.)

The Portsmouth Gas Co., Portsmouth, Ohio. (Melvin S. Mershon, Vice-Pres. & Gen. Mgr.)

Holding Companies

National Fuel Gas Co., New York, N. Y. (W. H. Locke, Pres.)

Manufacturer Companies

The Alpha-Lux Co., Inc., New York, N. Y. (Francis X. Schwartz, Asst. to Pres.)

Catita, S. A., Buenos Aires, Argentina. (Alfredo B. Gatti)

Comstock-Castle Stove Co., Quincy, Ill. (R. W. Spake, Pres.)

Franklin Lumber & Fixture Co., Columbus, Ohio. (C. C. Wright, Works Mgr.)

Lucas-Rotax Ltd., Toronto, Canada. (John A. Kitchen, Chief Combustion Engr.)

Metters, Ltd., Perth, W. Australia. (W. L. Hughes, Asst. Mgr.)

National Heating & Cooling Manufacturing Corp., Columbus, Ohio. (W. H. DeLancey, Dir. of Eng.)

Rosander Co., Minneapolis, Minn. (A. E. Rosander, Pres.)

Individual Members

Bob Abbott, F. B. Connelly Co., Seattle, Wash.

Wilbur B. Abrams, The Greenwich Gas Co., Greenwich, Conn.

Lloyd T. Akeley, General Electric Co., West Lynn, Mass.

Allan Alcott, Southern Counties Gas Co., Santa Ana, Calif.

Raymond E. Allard, Southern Counties Gas Co., Los Angeles, Calif.

Warren C. Allen, Pacific Gas & Electric Co., Antioch, Calif.

Cesar O. Baptista, Petroleos Mexicanos, Mexico City, Mexico.

Bert E. Bard, American Louisiana Pipe Line Co., Detroit, Mich.

John W. Bartholomeo, Philadelphia Electric Co., Norristown, Pa.

W. I. Beavers, Mountain Fuel Supply Co., Salt Lake City, Utah.

Jack A. Bell, Gas Light Co. of Columbus, Columbus, Ga.

Fred E. Bethurum, Lone Star Gas Co., Dallas, Texas.

K. C. Biedermann, Pacific Northwest Pipeline Corp., Salt Lake City, Utah.

H. A. Blair, Central Illinois Light Co., Peoria, Ill.

R. C. Blunk, Northern Natural Gas Co., Omaha, Nebr.

Harold A. Boyd, Pacific Natural Gas Co., Longview, Wash.

Andrew R. Bradley, Southern California Gas Co., Los Angeles, Calif.

Glenn Brewick, City of Palo Alto, Palo Alto, Calif.

J. R. Brown, Southern California Gas Co., Los Angeles, Calif.

Kenneth M. Brown, San Diego Gas & Electric Co., Chula Vista, Calif.

J. M. Burke, Southern California Gas Co., Los Angeles, Calif.

Roy R. Bush, Rockwell Manufacturing Co., Tulsa, Okla.

Robert G. Campbell, American Meter Co., Inc., Fullerton, Calif.

Lewis N. Case, Michigan Gas Utilities Co., Coldwater, Mich.

Horton L. Chandler, NEGA Service Corp., Cambridge, Mass.

Russell J. Chich, Cutler-Hammer, Inc., Milwaukee, Wisc.

Morton M. Chorost, Long Island Lighting Co., Mineola, N. Y.

Leon R. Chrzan, Linde Co., Tonawanda, N. Y.

Cullen W. Coates, Pacific Gas & Electric Co., San Francisco, Calif.

Lenore M. Cole, West Ohio Gas Co., Lima, Ohio.

Jo Ann Comstock, Jo Ann Comstock Displays, Lima, Ohio.

John C. Converse, Southern Counties Gas Co., Los Angeles, Calif.

L. C. Cox Jr., American Louisiana Pipe Line Co., Detroit, Mich.

Jack M. Daniels, Southern Counties Gas Co., Los Angeles, Calif.

Robert J. Dersch, American Louisiana Pipe Line Co., Detroit, Mich.

Harry M. Dietrick, West Ohio Gas Co., Lima, Ohio.

Thomas J. Dixon, American Louisiana Pipe Line Co., Detroit, Mich.

Robert L. Doepker, West Ohio Gas Co., Van Wert, Ohio.

A. P. Dolan, American Louisiana Pipe Line Co., Jackson, Tenn.

John L. Doss, Cutler-Hammer, Inc., New York, N. Y.

Avery L. Douglas, West Ohio Gas Co., Lima, Ohio.

Fred C. Durst, The East Ohio Gas Co., Cleveland, Ohio.

Richard L. Duttweiler, Iroquois Gas Corp., Buffalo, N. Y.

Arthur H. Edwards, Southern Counties Gas Co., Santa Ana, Calif.

B. M. England, Bryant Air Conditioning Corp., Philadelphia, Pa.

R. W. Featherstone, Northern Natural Gas Co., Omaha, Nebr.

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CONVENTION CALENDAR

1957

SEPTEMBER

16-18 •Annual A. G. A. Accident Prevention Conference, Sheraton-Jefferson Hotel, St. Louis, Mo.

18-20 •Southeastern Gas Association Convention, Robert E. Lee Hotel, Winston-Salem, N. C.

OCTOBER

7-9 •A. G. A. Annual Convention, Kiel Auditorium, St. Louis, Mo

NOVEMBER

4-8 •National Metal Exposition, Chicago, Ill. (A. G. A. will exhibit)

11-15 •National Hotel Exposition, Coliseum, New York City. (A. G. A. will exhibit)

13-15 •American Standards Association Conference and Annual Meeting, San Francisco, Calif.

14-16 •The American Society of Refrigerating Engineers, Semi-Annual Meeting, Shoreland Hotel, Chicago, Ill.

18-22 •National Warm Air Heating and Air Conditioning Association, Hotel Morrison, Chicago, Ill.

DECEMBER

1-6 •The American Society of Mechanical Engineers, Annual Meeting, Hotel Statler, New York City.

1958

JANUARY

6-8 •A. G. A. Home Service Workshop, Hotel Radisson, Minneapolis, Minn.

27-29 •American Society of Heating and Air Conditioning Engineers, Annual Meeting, Pittsburgh, Pa.

MARCH

17-21 •National Association of Corrosion Engineers, Annual Conference and Exposition, San Francisco, Calif.

20-21 •New England Gas Association, Annual Meeting, Hotel Statler, Boston, Mass.

24-26 •Mid-West Gas Association, Broadmoor Hotel, Colorado Springs, Colo.

27-28 •Oklahoma Utilities Association, Annual Convention, Biltmore Hotel, Oklahoma City, Okla.

31-April 2 •Gas Appliance Manufacturers Association, Annual Meeting, The Greenbrier, White Sulphur Springs, W. Va.

31-April 2 •A. G. A. General Management Section Conference, The Shoreham, Washington, D. C.

Personnel service

SERVICES OFFERED

Manager—for small gas operation or department head for medium size operation. Broad experience covers top management, sales, customer service, distribution and other related department functions. **1874.**

Sales Manager—recently associated with Servel, Inc., in a management capacity, available only because of elimination of field selling organization. Twenty years' experience at factory level with top name companies. Strong utility background, basically trained in retail work with Philadelphia Combinatfon Property. Broad experience in the applianee business, with good contacts in Eastern U.S. Engineering background. Salary desired $10,000. **1876.**

Public Relations Director—broad experience in all phases of public relations. Sound approach to community and customer relations. Publicity materials with a purpose. Would re-locate. **1877.**

Factory Sales Representative—with over 20 years' experience, seeks new connection with a reputable manufacturer, promoting and merchandising domestic gas appliances, preferably in the New York-New Jersey area. Top notch performance and references. **1878.**

Service Supervisor or Commercial Representative—16 years' experience. At present employed as assistant service manager for commercial and domestic service company. Would like position in New York State or Connecticut. **1879.**

Training Director—Sales and Personnel—practical background with thorough understanding of motivation, group and individual training, follow through. Experienced in recruitment and employment methods. Would be willing to relocate. **1880.**

Gas Engineering Executive—B.Sc. in Chemical Engineering. Broad experience in engineering, operations, and management of transmission and distribution systems. Thorough knowledge of pipeline design, construction, economics, contracts, customer relations, and utilization. Author of many technical articles and well versed in report writing. Returning to U.S. in October having been chief engineer and superintendent of gas transmission pipeline overseas. Desires executive operating or planning position in gas consulting, construction, or operations. International contacts and excellent references. **1881.**

Sales Manager—Approximately 20 years of utility experience, 11 years sales manager's experience on domestic and house heating appliances. Capable of complete organization and training of any utility sales department on domestic and house heating appliances. Preparation of sales and promotion budget—sales studies. Dealer promotion and training. General knowledge of advertising and campaign promotions. Top utility and manufacturers references. (46) Married. **1882.**

General or Operations Manager—27 years' experience in all phases of gas industry—last 7 in natural. Well known in industry. Available immediately. Details upon request. Married. (48) **1883.**

Pakistani wishes position as apprentice to learn of United States natural gas company operations. Educated at the University of Punjab with courses in Gas Technology. Westminster Technical College, London. Available after June 1958. **1884.**

Sales and Promotion Executive—20 years' experience in the field of advertising, promotion and sales. Ten years with a manufacturer of household gas appliances in advertising and selling capacity. Advertising agency experience as an account executive handling appliances. Have knowledge of and have worked extensively with distributors and dealers, also utilities. College graduate, veteran W.W.II. Married, one child. Complete resume of business background available on request. **1885.**

POSITIONS OPEN

Young Engineers—Philadelphia utility with divisions in Eastern Pennsylvania can use three recent engineering graduates. Will be given groundwork in all departments of company before regular assignment. In reply please state age, education, experience—if any. **0844.**

Engineers—Philadelphia utility can use two engineers experienced in gas distribution. Please state age, education, experience and other background information in replying. **0845.**

Gas Distribution Engineer—excellent opportunity available for qualified engineer in an integrated natural gas utility company in the Southwest. Must be experienced in gas distribution work. Preferably age 30 to 40. Attractive salary, good opportunities for advancement and excellent employee benefits. **0846.**

Manager—manufactured gas property in New England. Strong promotional background desired. **0847.**

Experienced home economist—with college degree in foods, for home service staff in one of the larger New England utilities. Send experience resume and personal data. Salary open. **0849.**

Compressor Station Engineer—large gas utility in Great Lakes Area needs graduate engineer, preferably under 40 with some compressor station experience. Assistant to superintendent in design, field engineering and other problems related to maintenance and operating of stations. Liberal benefits. Salary in line with education and experience. State personal and educational qualifications. **0828.**

Gas Engineer—Connecticut utility wants an engineering graduate with some experience in gas production, distribution and customers service. Prefer man under 35. Submit complete resume. Starting salary $7,000-$7,500 plus other benefits. **0851.**

Pipelines, utilities, sell larger proportion of natural gas production

IN CONTRAST to the general impression, direct sales of natural gas by producers to industrial consumers are increasing less rapidly than sales to pipelines and utilities, according to a recent study by the American Gas Association Bureau of Statistics.

The purchase of substantial portions of natural gas by consumers at or near the point of production without handling by pipelines or utilities has created considerable interest, and the possibility of increases in such sales has been mentioned by producers as an alternative to the sale of gas in interstate commerce, with resulting regulation by the Federal Power Commission.

Such statements have been particularly prevalent since the Supreme Court decision in the Phillips Petroleum Company case.

Any major diversion of gas to direct industrial customers would of course have a substantial impact upon supplies available to pipelines and distributors. However, the A. G. A. study shows that during the past ten years, significantly greater proportions of total natural gas production are being marketed through pipelines and utilities. Between 1935 and 1947 sales by pipelines and utilities, as a proportion of total marketed production, varied between 49 and 54 per cent, with a 1947 percentage of 52.8.

Beginning in 1948 there has been a relative consistent increase in this proportion with 64.5 per cent of total production being marketed by pipelines and utilities in 1956, and an estimated 65.6 per cent this year.

This growth reflects primarily the major post-war increase in the nation's long distance pipeline network, and the huge demand for natural gas in metropolitan areas remote from major producing fields. Between 1935 and 1956 total sales by utilities and pipelines increased 556 per cent, while aggregate marketed production of natural gas for all uses advanced 412 per cent.

Comparison of aggregate marketed production with total interstate shipments of natural gas reinforces the conclusion developed above. In 1945, interstate shipments of 1.1 trillion cubic feet represented only 27.4 per cent of marketed production. Since then the proportion has grown steadily. In 1955, interstate shipments amounted to 5.1 trillion cubic feet, equivalent to a new peak of 53.9 per cent of marketed production. Unfortunately, Bureau of Mines data on 1956 interstate shipments are not yet available, so that no analysis is possible now to determine whether this trend continued last year.

GAS UTILITY AND PIPELINE SALES OF NATURAL GAS AND TOTAL MARKETED PRODUCTION OF NATURAL GAS, 1935-1957
(Millions of Therms)

Year	Marketed Production	Pipeline and Utility Sales	Percentage Handled by Pipelines and Utilities
1935	21,170	10,635.1	50.2%
1940	29,390	14,681.4	50.0
1945	43,450	22,562.8	51.9
1946	44,640	22,913.2	51.3
1947	49,260	26,021.5	52.8
1948	55,340	30,164.0	54.5
1949	58,270	32,233.9	55.3
1950	67,530	38,499.9	57.0
1951	80,160	44,718.3	55.8
1952	86,140	49,293.2	57.2
1953	90,270	53,171.3	58.9
1954	93,987	58,014.1	61.7
1955	101,104	63,337.4	63.1
1956	108,296	69,804.2	64.5
1957 est	117,587	77,106.0	65.6

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